



TUBES
PARTS
BATTERIES
TEST EQUIPMENT
SEMICONDUCTOR DEVICES

 RADIO CORPORATION OF AMERICA

REFERENCE BOOK

1960

HUDSON RADIO & TV CORP.

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1960



REFERENCE BOOK

RECEIVING TUBES
INDUSTRIAL-TYPE TUBES
PICTURE TUBES
CATHODE-RAY AND POWER TUBES
PHOTOTUBES
SERVICE PARTS
TEST EQUIPMENT
BATTERIES
SEMICONDUCTOR PRODUCTS

A DAILY PRODUCT REMINDER
FOR
INDUSTRY
COMMUNICATIONS
RADIO — TELEVISION
RESEARCH

PRICE **1.00**

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ELECTRON TUBE DIVISION

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RCA TECHNICAL PUBLICATIONS

The technical publications listed below for each division are packed with up-to-the-minute information logically arranged for ready reference and application to your needs.

NOTE: All prices are net and apply in the U.S.A. They are subject to change and cancellation without notice.

ELECTRON TUBE DIVISION

Ask your RCA Distributor for these publications, or write directly to Commercial Engineering, Electron Tube Division, Radio Corporation of America, Harrison, New Jersey. When ordering from Commercial Engineering make remittance payable in U.S. dollars to Radio Corporation of America.

• **RCA TUBE HANDBOOK—HB-3** (7 $\frac{3}{8}$ " x 5 $\frac{1}{4}$ "). Five deluxe 2-inch-capacity binders imprinted in gold. The bible of the industry—contains over 3400 pages of loose-leaf data and curves on RCA receiving tubes; picture tubes; oscillograph tubes; special-purpose kinescopes; photosensitive devices including phototubes, photoconductive cells, photojunction cells, and camera tubes; storage tubes; power tubes; gas tubes; transistors and silicon rectifiers; and other miscellaneous types for special applications. Available on subscription basis. Price \$17.50* including service for first year. Write to Commercial Engineering for descriptive folder and order form.

• **RCA RECEIVING TUBE MANUAL—RC-19** (8 $\frac{1}{4}$ " x 5 $\frac{3}{8}$ ")—384 pages. Revised, expanded, and brought up to date. Contains technical data on more than 625 receiving tubes, including types for black-and-white and color television and series-string applications. Features tube theory written for the layman, application data for radio and television circuits, Resistance-Coupled Amplifier Section, and several circuits for high-fidelity audio amplifiers. Features lie-flat binding. Price 75 cents.*

• **RADIOTRON DESIGNER'S HANDBOOK—4th Edition** (8 $\frac{3}{4}$ " x 5 $\frac{1}{2}$ ")—1500 pages. New, enlarged, up-to-date 4th Edition is comprehensive reference thoroughly covering the design of radio and audio circuits and equipment. Written for the design engineer, student, and experimenter. Contains 1000 illustrations, 2500 references, and cross-referenced index of 7000 entries. Edited by F. Langford-Smith of Amalgamated Wireless Valve Company Pty Ltd. in Australia. Price \$7.00.*

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Electron Tube Division (cont'd)

• **RCA TRANSMITTING TUBES**—TT-4 ($8\frac{3}{8}" \times 5\frac{3}{8}"$)—256 pages. Written for the engineer, service technician, radio amateur, student, and experimenter. Contains basic information on generic tube types, on tube parts and materials, on tube installation and application, and on interpretation of tube data. Includes maximum ratings, typical operating values, and characteristics curves for power tubes having plate-input ratings up to 4 kilowatts, and maximum ratings and operating values for associated rectifier tubes. Contains sections on transmitter-design considerations and on rectifier circuits and filters. Features classification charts for quick, easy selection of tubes, and circuit diagrams for transmitting and industrial applications. Features a flat binding. Price \$1.00.*

• **RCA POWER AND GAS TUBES**—PG-101D ($10\frac{7}{8}" \times 8\frac{3}{8}"$)—32 pages. Technical information on over 175 RCA vacuum power tubes, rectifier tubes, thyratrons, and ignitrons. Includes terminal connections. Price 30 cents.*

• **RCA RECEIVING-TYPE TUBES FOR INDUSTRY AND COMMUNICATIONS**—RIT-104A ($10\frac{7}{8}" \times 8\frac{3}{8}"$)—24 pages. Technical information on 150 RCA "special red" tubes, premium tubes, computer tubes, pencil tubes, glow-discharge tubes, small thyratrons, low-microphonic amplifier tubes, and other special types. Includes socket connection diagrams. Price 25 cents.*

• **RCA RECEIVING TUBES AND PICTURE TUBES**—1275-H ($10\frac{7}{8}" \times 8\frac{3}{8}"$)—36 pages. Booklet contains classification chart, characteristics chart, and base and envelope connection diagrams on more than 700 entertainment receiving tubes and picture tubes. Price 25 cents.*

• **RCA TRIPLE PINDEX**—PINDEX-109 ($5\frac{1}{4}" \times 8\frac{1}{4}"$)—Base diagrams for more than 2000-JEDEC-registered receiving tubes and picture tubes. The Receiving-Tube Section includes over 1500 base diagrams arranged so that at least three required bases may be observed at one time. The Picture-Tube section contains base diagrams of more than 400 picture tubes. Another section contains a group of over 200 small industrial receiving-type tubes and over 200 foreign receiving tubes which are cross-referenced to base diagrams in the Receiving-Tube Section. All tube types and base diagrams are arranged in numerical-alphabetical sequence. Price \$1.75.*

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Electron Tube Division (cont'd)

- **RCA BATTERIES**—BAT-134B (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ")—12 pages. Contains characteristics, terminal types, and socket patterns of more than 100 RCA dry batteries for radio, flashlight, and industrial applications. Includes a battery interchangeability directory, and a battery replacement guide for portable radios. Price 25 cents.*
- **BATTERIES FOR TRANSISTOR APPLICATIONS**—TBA-107A (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ".) Contains technical data, dimensional outlines, and curves for 24 dry batteries of the LeClanché and Mercury types specifically designed for low-current applications utilizing transistors. Price 25 cents.*
- **TECHNICAL BULLETINS**—Complete authorized information on RCA transmitting tubes and other tubes for communications and industry. Be sure to mention tube-type bulletin desired. Single copy on any type free on request.
- **RCA PREFERRED TYPES LIST**—PTL-501G (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ")—8 pages. Lists RCA Preferred Tube Types both receiving and non-receiving by function. An aid to equipment designers in the selection of tube types for new equipment design. Single copy free on request.
- **RCA HEADLINERS FOR HAMS**—HAM-103B (10 $\frac{7}{8}$ " x $\frac{3}{8}$ ")—4 pages. Technical information and terminal connection diagrams for 48 RCA "HAM" PREFERENCE TYPES: modulators, class C amplifiers and oscillators, frequency multipliers, rectifier tubes, thyratrons, cold-cathode (glow-discharge) tubes, and cathode-ray tubes. Single copy free on request.
- **RCA INTERCHANGEABILITY DIRECTORY OF INDUSTRIAL-TYPE ELECTRON TUBES**—ID-1020A (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ")—16 pages. Lists more than 2000 type designations of 26 different manufacturers arranged in alphabetical-numerical sequence; shows the RCA Direct Replacement Type or the RCA Similar Type, when available. Price 20 cents.*
- **RCA PHOTSENSITIVE DEVICES AND CATHODE-RAY TUBES**—CRPD-105A (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ")—32 pages. Contains technical information on 134 RCA tubes including single-unit, twin-unit, and multiplier phototubes; camera and image-converter tubes; flying-spot tubes; monitor, projection, transcriber, and view-finder kinescopes; oscillograph and storage tubes. Price 30 cents.*

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Electron Tube Division (cont'd)

- **TV SERVICING**—TVS-1030 (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ") 48 pages. This booklet contains a compilation of articles on TV trouble shooting, TV tuner alignment, and TV circuit analysis by RCA's expert in the field of TV servicing and test equipment—John R. Meagher. Price 35 cents.*
- **TV SERVICING, SUPPLEMENT 1**—TVS-1031 (10 $\frac{7}{8}$ " x 8 $\frac{3}{8}$ ") 12-page booklet by John R. Meagher on solving trouble-shooting problems in those hard-to-service television receivers known to service technicians as "tough" sets or "dogs". Emphasizes time-saving component-checking techniques and proper use of test equipment. Price 15 cents.*
- **PRACTICAL COLOR TELEVISION** Revised Edition (11" x 8 $\frac{1}{2}$ ")—84 pages. Black-and-white and color illustrations. Presents comprehensive information on basic color principles, transmitter color signal, color camera, and color kinescope. Covers commercial-model receiver circuit using the RCA-15GP22 color picture tube, as well as installation and service of color receivers. Provides detailed description of color-test equipment. Price \$2.00.*
- **PRACTICAL COLOR TELEVISION, SUPPLEMENT 1**—(11" x 8 $\frac{1}{2}$ ")—Contains 36 pages plus fold-out schematic and block diagrams; describes theory, operation and servicing of large-screen color TV receiver utilizing RCA-21AXP22 color picture tube; includes 55 black-and-white and color illustrations including schematic and block diagrams, wave-forms, and explanations of color circuits and adjustments. Price 75 cents.*

Service Parts Directories for RCA Victor TV Receivers

- SP-1042:** For period covering late 1955, 1956 and 1957. Covers over 250 models of RCA Victor black-and-white and color-TV receivers. Includes servicing information on printed circuit boards and adjustment and trouble-shooting information on the RP-205 and RP-208 record changers. 128 pages. Price, \$2.00 per copy.
- SP-1035:** For period covering 1954 and early 1955. Covers 106 models of RCA Victor black-and-white and color-TV receivers. Includes adjustment and trouble-shooting information on the RP-197 and RP-198 record changers. Also shown are typical r-f wave forms for all vhf channels. 72 pages. Price, \$1.25 per copy.
- SP-1028:** For period covering 1953. Covers 108 models of RCA Victor TV receivers. Includes wiring diagrams for all listed receivers plus information on radio chassis used in radio-TV combination receivers. 84 pages. Price, \$1.35 per copy.

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Electron Tube Division (cont'd)

SP-1021: For period covering 1952. Covers 27 models of RCA Victor TV receivers. Includes wiring diagrams for all listed receivers. 36 pages. Price, 50 cents per copy.

SP-1014: For period covering 1950 and 1951. Covers 71 models for RCA Victor TV receivers. 142 pages. Price, \$1.50 per copy.

SP-1007: For period covering 1946 through June 1950. Covers 56 models of RCA Victor TV receivers. 80 pages. Price, 75 cents per copy.

• **RCA VICTOR TV SERVICE PARTS GUIDE—SP-2001B:** For period covering 1946 through 1956. Lists stock numbers of major replacement parts for RCA Victor TV sets by receiver-model number and corresponding receiver-chassis number. Also lists stock numbers of tuner-replacement parts by tuner-chassis number. 16 pages. (10 $\frac{1}{8}$ " x 8 $\frac{3}{8}$ "). Price, 25 cents per copy.

• **SERVICE PARTS DIRECTORY FOR RCA VICTOR RADIOS & PHONOGRAPHS—SP-1008B:** For period covering 1954 through June 1958. Lists stock numbers of major replacement parts by receiver model number for all RCA Victor radios. Also includes stock numbers of major replacement parts for RCA phonographs, and an index cross-reference of RCA record changers to cartridge and styli. 16 pages. (8 $\frac{3}{8}$ " x 10 $\frac{1}{8}$ "). Price, 25 cents per copy.

SEMICONDUCTOR DIVISION

Ask your RCA Distributor for these publications, or write directly to Commercial Engineering, Semiconductor Division, Radio Corporation of America, Somerville, New Jersey. When ordering from Commercial Engineering make remittance payable in U.S. dollars to Radio Corporation of America.

• **RCA SEMICONDUCTOR PRODUCTS—SCD-108B** (10 $\frac{1}{8}$ " x 8 $\frac{3}{8}$ ")—40-page booklet contains technical data on RCA transistors and silicon rectifiers. Includes section on transistor theory, an interchangeability directory which lists over 1100 type designations of 29 different manufacturers, and a section on circuits containing 37 schematics illustrating some of the more important applications of transistors and silicon rectifiers. Price 30 cents.*

*Prices shown apply in U.S.A. and are subject to change without notice.

RCA MAGAZINES

RCA RADIO & TELEVISION SERVICE NEWS

This publication is designed to keep the dealer and service technician informed on the latest television and radio sales and servicing techniques. Read it regularly for interesting articles as well as for helpful hints on new merchandising procedures, new products, and new promotions. Published bi-monthly. Available free of charge from your RCA Electron Tube Distributor.



RCA TUBE TIPS

This popular newsletter keeps the broadcast engineer up to date on the latest developments in broadcast tubes. It is a timely publication containing valuable application information, technical tips, and new product data. Published bi-monthly. Sent free of charge to broadcast station personnel by the RCA Electron Tube Division.



RCA HAM TIPS

Contains a wealth of informative articles on all phases of "ham" activity, including exclusive construction articles written by RCA personnel actively engaged in amateur radio work. Keep abreast of the latest, up-to-the-minute information on new circuits, TVI civil defense equipment, and novice gear. Published bi-monthly. Free from your RCA Electron Tube Distributor.



RCA ELECTRONICS PIONEER

A vital magazine exclusively prepared for readership by design engineers, purchasing agents, and executives of electronic equipment manufacturing firms and research and development companies. Keeps them alerted to RCA's new product achievements. It accentuates RCA developments and applications of RCA industrial tubes, receiving tubes, picture tubes, test equipment, batteries, semiconductors, and materials. Published quarterly. Available without charge from your RCA Electron Tube Distributor.



RCA RECEIVING TUBE CHART

Miniature, Metal, GT, and other Receiving Types

(For Footnotes and Base Diagrams, See Pages 57 through 70)

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use <small>Values in right plus operating conditions and characteristics for indicated typical use</small>	Plate Supply Volts	Grid Bias μ Volts	Screen Supply Volts	Screen Current Ma	Plate Current Ma	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Dims.	S.C.	C.T.	Volts	Temp.											
00-A	Detector Triode	D12a	4D	D.C. F	5.0	0.25	Grid-Leak Detector	45	Grid Return to (-) Filament			1.5	30000	666	20	—	—
01-A	Detector & Amplifier	D12a	4D	D.C. F	5.0	0.25	Class A Amplifier	90 135	- 4.5 - 9.0	—	—	2.5 3.0	11000 10000	725 800	8.0 8.0	—	—
0Y4	Half-Wave Gas-Rectifier	B2	4BU	Cold	—	—	Rectifier	Max. Peak Inverse Plate Volts, 300 Max. DC Starting Volts, 95			Max. Peak Plate Current, 500 ma Max. DC Output Current, 75 ma						
0Z4	Full-Wave Gas-Rectifier	B3	4R	Cold	—	—	Rectifier	Starting Supply Voltage per Plate, 300 min. peak volts Peak Plate Current, 200 max. ma DC Output Current, 75 max., 30 min. ma DC Output Voltage, 300 max. volts.									
0Z4-G	Full-Wave Gas-Rectifier	B2	4R	Cold	—	—	Rectifier	Max. Peak Inverse Volts, 330 Max. Peak Plate Ma., 5 Max. DC Output Ma., 0.5 Max. Peak Heater-Cathode Volts, 140									
1A3	HF Diode	B0	5AP	H	1.4	0.15	Detector Rectifier	Max. Peak Inverse Volts, 330 Max. Peak Plate Ma., 5 Max. DC Output Ma., 0.5 Max. Peak Heater-Cathode Volts, 140									
1A4-P	Remote-Cutoff Pentode	D9	4M	D.C. F	2.0	0.06	Amplifier	For other characteristics, refer to Type 1D5-GP									
1A5-GT	Power Amplifier Pentode	C2c	6X	D.C. F	1.4	0.05	Class A Amplifier	85 90	- 4.5 - 4.5	85 90	0.7 0.8	3.5 4.0	300000 300000	800 850	—	25000 25000	0.100 0.115
1A6	Pentagrid Converter ϕ	D9	6L	D.C. F	2.0	0.06	Converter	135 180	- 3.0 min.	67.5 67.5	2.5 2.4	1.2 1.3	400000 500000	Anode-Grid (+2): 180 μ max. volts, 2.3 ma. Oscillator-Grid (+1) Resistor ϕ , Conversion Transcond., 300 micromhos.			
1A7-GT	Pentagrid Converter ϕ	C8	7ZK	D.C. F	1.4	0.05	Converter	90	0	45 \clubsuit	0.7	0.6	600000	Anode-Grid (+2): 90 max. volts, 1.2 ma. Oscillator-Grid (+1) Resistor, 0.2 meg. Conversion Transcond., 250 micromhos.			
1AC5	Power Pentode	A	8CP	F	1.25	0.04	Class A Amplifier	45 67.5	- 3 - 4.5	45 67.5	0.2 0.4	1.0 2.0	170000 150000	600 750	—	40000 25000	0.015 0.050
1AD5	Sharp-Cutoff Pentode	A	8CP	F	1.25	0.04	Class A Amplifier	30 67.5	0 0	30 67.5	0.16 0.75	0.45 1.85	700000 700000	430 735	—	—	—
1AX2	Half-Wave Rectifier	B5a	9Y	F	1.4	0.65	Pulsed Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 25000 Max. Peak Plate Ma., 11			Max. Average Plate Ma., 1						
1B3-GT	Half-Wave Rectifier	D8	3C	F	1.25	0.2	Pulsed Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 30000 Max. Peak Plate Ma., 17			Max. Average Plate Ma., 2 Max. Frequency of Supply Voltage, 300 Kc						

1B4-P	RF Amplifier Pentode	D8	4M	D.C. F	2.0	0.06	Amplifier	For other characteristics, refer to Type 1E3-GP.									
1B5-2S5	Duplex-Diode Triode	D8	8M	D.C. F	2.0	0.06	Triode Unit as Amplifier	For other characteristics, refer to Type 1H6-G.									
1B7-GT	Pentagrid Converter	C3	7ZK	D.C. F	1.4	0.10	Converter	90	0	45	1.3	1.5	350000	Anode-Grid (#2): 90 max. volts, 1.6 ma. Oscillator-Grid (#1) Resistor, 0.2 meg. Conversion Transcond., 350 micromhos.			
1C3-GT	Power Amplifier Pentode	C8c	4X	D.C. F	1.4	0.10	Class A Amplifier	83 90	- 2.0 - 2.5	83 90	1.6 1.6	2.0 2.5	110000 115000	1500 1550	9000 8000	0.20 0.24	
1C6	Pentagrid Converter	D8	8L	D.C. F	2.0	0.12	Converter	For other characteristics, refer to Type 1C7-G.									
1C7-G	Pentagrid Converter	D8	7Z	D.C. F	2.0	0.12	Converter	135 180	- 3.0 - 3.0	67.5 67.5	2.5 2.0	1.3 1.5	600000 700000	Anode-Grid (#2): 180% max. volts, 4.0 ma. Oscillator-Grid (#1) Resistor = . Conversion Transcond., 325 micromhos.			
1D5-GP	Remote-Cutoff Pentode	D8	8Y	D.C. F	2.0	0.06	Class A Amplifier	90 180	- 3.0 min.	67.5 67.5	0.9 0.8	2.2 2.3	600000 1.0	720 750	—	—	
1D5-GT	Remote-cutoff Triode	D8	8R	D.C. F	2.0	0.06	Class A Amplifier	180	- 3.0	67.5	0.7	2.2	600000	650	—	—	
1D7-G	Pentagrid Converter	D8	7Z	D.C. F	2.0	0.06	Converter	For other characteristics, refer to Type 1A6.									
1D8-GT	Diode-Triode-Power Pentode	C8c	8AJ	D.C. F	1.4	0.10	Pentode Unit as Class A Amplifier	45	- 4.5	45	0.3	1.6	300000	650	—	20000	0.035
								90	- 9.0	90	1.0	5.0	200000	925	—	12000	0.200
							Triode Unit as Class A Amplifier	45	0	—	—	0.3	77000	325	25	—	—
								90	0	—	—	1.1	43500	575	25	—	—
1D8S	Diode Remote-Cutoff Pentode	D8	88W	F	1.4	0.5	Triode Unit as Class A Amplifier	67.5	0	67.5	0.55	2.1	600000	630	—	—	
1E5-GP	RF Amplifier Pentode	D8	8Y	D.C. F	2.0	0.06	Class A Amplifier	90 180	- 3.0 - 3.0	67.5 67.5	0.7 0.6	1.6 1.7	1.0 1.3	600 650	—	—	
1E7-GT	Twin-Pentode Power Amplifier	C8c	8C	D.C. F	2.0	0.24	Class A Amplifier	135	- 2.5	135	—	Power Output is for one tube at stated plate-to-plate load.			24000	0.575	
1E8	Pentagrid Converter	A	8CM	F	1.25	0.04	Converter	45 67.5	0 0	45 67.5	1.1 1.5	0.6 1.0	400000 400000	Oscillator Grid (#1) Resistor, 0.1 meg. Conversion Transcond., 150 micromhos			
1F4	Power Amplifier Pentode	D12a	8K	D.C. F	2.0	0.12	Amplifier	For other characteristics, refer to Type 1F5-G.									
1F5-G	Power Amplifier Pentode	D11a	6X	D.C. F	2.0	0.12	Class A Amplifier	90 135	- 3.0 - 4.5	90 135	1.1 2.4	4.0 8.0	300000 200000	1400 1700	—	20000 16000	0.11 0.31
1F6	Duplex-Diode Pentode	D8	8W	D.C. F	2.0	0.06	Pentode Unit as Amplifier	For other characteristics, refer to Type 1F7-G.									
1F7-G	Duplex-Diode Pentode	D8	7AF	D.C. F	2.0	0.06	Pentode Unit as Class A Amplifier	180	- 1.5	67.5	0.7	2.2	1.0	650	—	—	

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections	Cathode Type and Rating			Use	Plate Sup- ply	Grid Bias	Screen Cur- rent	Plate Cur- rent	AC Plate Resis- tance	Trans- condc- tance (Grid-plate)	Amplif- ication Factor	Load Imped- ance	Power Out- put	
			Class	EC	LI											
1G3-GT/1B3-GT	Half-wave Rectifier	C10	F	1.25	0.2	Full-wave Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	90	-6.0	—	2.3	10700	825	8.8		
1G4-GT	Rectifier-Triode	C2K	D.C.	1.4	0.05	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 33000 (Abs.) Max. Average Plate Ma., 1.8 Frequency Range of Supply Voltage, 1.5 to 100 Kc.	90	-6.0	90	2.5	133000	1500	8500	0.25	
1G5-G	Power Amplifier	D1C	D.C.	2.0	0.12	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 160000 Max. Average Plate Ma., 9000	90	-13.5	135	2.5	8.7	15000	1500	9000	0.55
1G6-GT	Triode-Transformer Amplifier	C2K	D.C.	1.4	0.10	(Class B Amplifier)	Power Output is for one tube at stated plate-to-plate load.	90	0	0	—	—	—	13000	0.350	
1H4-G	Detector Amplifier	D3	D.C.	2.0	0.06	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 30000 Max. Average Plate Ma., 9.3	135	-9.0	135	3.0	10300	300	9.3	—	
1H4-G	Detector Amplifier	D3	F	2.0	0.06	(Class B Amplifier)	Max. Peak Inverse Plate Volts, 240000 Max. Average Plate Ma., 275	90	0	0	0.15	240000	275	65	—	
1H6-G	Triode-Transformer Amplifier	D3	D.C.	2.0	0.06	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	135	-3.0	—	0.8	35000	575	20	—	
1J3	Half-wave Rectifier	D2	F	1.25	0.2	Full-wave Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	135	-16.5	135	2.0	7.0	105000	950	13500	0.45
1J5-G	Power Pentode	D1K	D.C.	2.0	0.12	(Class A Amplifier)	Power Output is for one tube at stated plate-to-plate load.	135	-16.5	135	2.0	7.0	105000	950	13500	0.45
1J6-GT	Triode-Transformer Amplifier	C10	D.C.	2.0	0.24	(Class B Amplifier)	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	135	-3.0	0	—	—	—	10800	3.1	
1K3	Half-wave Rectifier	C10	F	1.25	0.2	Full-wave Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 600000 Max. Average Plate Ma., 925	90	67.5	1.2	2.9	600000	925	—	—	
1L1	RF Amplifier	D0	D.C.	1.4	0.05	(Class A Amplifier)	Max. Peak Inverse Plate Ma., 50	90	0	0	2.0	4.5	260000	1025	—	
1L2	Power Pentode	D0	D.C.	1.4	0.05	(Class A Amplifier)	For other characteristics, refer to Type 1A5-GT. Anode Grid (#2): 90 max. volts, 1.2 ma. Oscillator Grid (#1) Resistor, 0.2 meg. Conversion Transcond., 300 micromhos.	90	0	0	0.6	0.5	650000	—	—	
1L4	Power Amplifier	D3	D.C.	1.4	0.05	Amplifier	For other characteristics, refer to Type 1D8-GT. Anode Grid (#2): 90 max. volts, 1.2 ma. Oscillator Grid (#1) Resistor, 0.2 meg. Conversion Transcond., 250 micromhos.	90	0	0	0.6	0.55	750000	—	—	
1L6	Power Pentode	D0	D.C.	1.4	0.05	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	90	0	0	—	—	—	—	—	
1L6A	Power Pentode	D0	D.C.	1.4	0.05	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	90	0	0	—	—	—	—	—	
1L8A	Power Amplifier	D0	D.C.	1.4	0.05	(Class A Amplifier)	Max. Peak Inverse Plate Volts, 26000 (Abs.) Max. Average Plate Ma., 0.5	90	0	0	—	—	—	—	—	

1LC5	Sharp-Cutoff Pentode	B0	7A0	D.C. F	1.4	0.05	Class A Amplifier	45 90	0 0	45 45	0.35 0.30	1.10 1.15	700000 1.0	750 775				
1LC8	Pentagrid Converter	B0	7AK	D.C. F	1.4	0.05	Converter	45 90	0 0	35 35	0.75 0.75	0.70 0.75	300000 650000	Anode-Grid (# 2): 50 max. volts, 1.4 mm. Oscillator-Grid (# 1) Resistor, 0.2 meg. Conversion Transcond. 275 micromhos.				
1LD5	Diode-Pentode	B5	6AX	D.C. F	1.4	0.05	Pentode Unit as Class A Amplifier	Plate Supply, 90 v applied through 1 meg. resistor. 5.6 meg. resistor. Grid Bias, 0 v. Grid Resistor, 10						Screen Supply, 90 v applied through megohms. Voltage Gain, 101 approx.				
1LE3	Medium-Mu Triode	B0	6AA	D.C. F	1.4	0.05	Class A Amplifier	90 90	0 - 3			4.5 1.4	11260 19000	1300 760	14.5 14.5			
1LG5	Remote-Cutoff Pentode	B0	7A0	D.C. F	1.4	0.05	Class A Amplifier	90 90	0 - 1.5	45 90	0.4 0.9	1.7 3.7	1.0 500000	800 1150				
1LH4	Diode-High-Mu Triode	B5	6AG	D.C. F	1.4	0.05	Triode Unit as	For other characteristics, refer to Type 1K5-GT.										
1LM6	Sharp-Cutoff Pentode	B5	7A0	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.35	1.6	1.1	800				
1N5-GT	Sharp-Cutoff Pentode	C3	5Y4	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.3	1.2	1.5	750				
1N6-G	Diode-Power Amplifier Pentode	D3	7AM	D.C. F	1.4	0.05	Pentode Unit as Class A Amplifier	90	- 4.5	90	0.7	3.4	300000	800		25000	0.1	
1P5-GT	Remote-Cutoff Pentode	C3	5Y4	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.7	2.3	800000	750				
1Q5-GT	Beam Power Tube	C2	6AF	D.C. F	1.4	0.1	Class A Amplifier	90	- 4.5	90	1.3	9.5	90000	2200		8000	0.27	
1R5	Pentagrid Converter	B0	7AT	D.C. F	1.4	0.05	Converter	45 90	0 0	45 67.5	1.9 3.2	0.7 1.6	600000 600000	Grid #1 Resistor, 100000 ohms. Conversion Transcond. 300 micromhos.				
1R4	Power Amplifier Pentode	B0	7AV	D.C. F	1.4	0.1	Class A Amplifier	45 90	- 4.5 - 7.0	45 67.5	0.8 1.4	3.8 7.4	100000 100000	1250 1575		8000 8000	0.065 0.27	
1R5	Diode-Pentode	B0	6AU	D.C. F	1.4	0.05	Pentode Unit as AF Amplifier	Plate Supply, 90 v applied through 1 meg. resistor. Screen Supply, 90 v applied through 3.1 meg. resistor. Grid Bias, 0 volts. Grid Resistor, 10 megohms. Voltage Gain, 66 approx.										
1T4	Remote-Cutoff Pentode	B0	6AR	D.C. F	1.4	0.05	Class A Amplifier	45 90	0 0	45 67.5	0.7 1.4	1.7 3.5	350000 500000	700 900				
1T5-GT	Beam Power Tube	C2	6X	D.C. F	1.4	0.05	Class A Amplifier	90	- 6.0	90	0.8	6.5	250000	1150		14000	0.17	
1T6	Diode-Pentode	A	8DA	F	1.25	0.04	Pentode Unit as Class A Amplifier	45 67.5	0 0	45 67.5	0.71 0.4	0.75 1.6	500000 400000	475 600				
1U4	Sharp-Cutoff Pentode	B0	6AR	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.50	1.0	1.0	900				
1U5	Diode-Pentode	B0	8BW	D.C. F	1.4	0.05	Pentode Unit as Class A Amplifier	67.5	0	67.5	0.4	1.6	600000	625				
1-V	Half-Wave Rectifier	D5	1G	M	6.3	0.3	With Capacitive-Input Filter	Max. AC Plate Volts (RMS), 325 Max. DC Output Ma., 45 Min. Total Effective Plate Supply Impedance: Up to 117 volts, 0 ohms; at 150 volts, 30 ohms; at 325 volts, 75 ohms.										
1V2	Half-Wave Rectifier	B0	8U	F	0.625	0.3	Pulsed Rectifier	Max. Peak Inverse Plate Volts, 7500 Max. Peak Plate Ma., 10 Min. Average Plate Ma., 0.5										

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to aid in specifying conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) mhos	Amplification Factor	Load for Rated Power Output Ohms	Power Output Watts		
		Max.	S.C.	C.T.	Volts	Amper.													
1X2-A	Half-Wave Rectifier	84	8V	F	1.25	0.2	Pulsed Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 18000		Max. Average Plate Ma., 1									
1X2-B	Half-Wave Rectifier	84	9V	F	1.25	0.2	Pulsed Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 22000 (Absolute Value)		Max. Average Plate Ma., 0.5									
2A3	Power Amplifier Triode	82a	40	F	2.5	2.5	Class A Amplifier	250	-45.0	—	—	60.0	800	5250	4.2	2500	3.5		
							Push-Pull Class AB ₁ Amplifier	300	Cath. Bias, 780 ohms	80.0	—	—	—	—	—	—	—	—	—
2A4-G	Glow-Discharge Triode	00	14	D.C. F	2.5	2.5	Relay Service	Max. Peak Inverse Anode Volts, 200		Max. Av. Anode Current, 1.25 ampere Max. Peak Forward Anode Volts, 200									
2A5	Power Amplifier Pentode	D12a	80	H	2.5	1.75	Amplifier	For other characteristics, refer to Type 6F8-G.											
2A6	Duplex-Diode High-Mu Triode	D9	6Q	H	2.5	0.8	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.											
2A7	Pentagrid Converter	D9	7C	H	2.5	0.8	Converter	For other characteristics, refer to Type 6A8											
2AF4-A	Medium-Mu Triode	80	7DK	H	2.35	0.6	Class A Amplifier	80	Cath. Bias Res., 150 ohms		18	2270	6600	15	—	—	—		
							Oscillator at 950 Mc.	100	Grid Bias Volts, -4	22	2130	7500	16	Grid Current (Approx.), 400 μ a. Useful Power Output, 160 milliwatts					
2B7	Duplex-Diode Pentode	D9	7D	H	2.5	0.8	Pentode Unit as Amplifier	For other characteristics, refer to Type 6B8-G.											
2BN4	Medium-Mu Triode	80	7ED	H	2.3	0.6	Class A Amplifier	150	Cath. Bias	—	—	9	6300	6800	43	Cath. Bias Res., 220 ohms			
2CY5	Sharp-Cutoff Tetrode	80	7EW	H	2.4	0.6	Class A Amplifier	125	-1	80	1.5	10	100000	8000	—	—	—		
2E5	Electron-Ray Tube	D5	4R	H	2.5	0.8	Visual Indicator	For other characteristics, refer to Type 6E5.											
2EN5	Twin Diode	80	7FL	H	2.1	0.45	Horizontal Phase Detector	Max. Peak Heater-Cathode Volts, \pm 200		DC Volts Not to Exceed +100								Max. DC Plate Ma., 5	
3A2	Half-Wave Rectifier	84	8DT	H	3.15	0.22	Pulsed Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 18000		Max. Average Plate Ma., 1.5									
3A3	Half-Wave Rectifier	D2	8E2	H	3.15	0.22	Pulsed Rectifier in TV Receivers	Max. Peak Inverse Plate Volts, 30000		Max. Average Plate Ma., 1.5									
3AB-GT	Diode-Triode RF Amplifier Pentode	CS	8A3	D.C. F	1.4	0.1	Triode Unit as Class A Amplifier	90	0	—	—	0.2	200000	325	65	—	—		
					2.8	0.05	Pentode Unit as Class A Amplifier	90	0	90	0.5	1.5	800000	750	—	—	—		

RCA Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating		Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans- conduc- tance (Grid-plate) μ mbars	Amplifi- cation Factor	Load or Stated Power Output Ohms	Power Out- put Watts	
		Diagn.	S. C.	C. T.	Volts												Imp.
3Q5-GT	Beam Power Tube	C2c	7AP	D.C. F-	1.4 2.8	0.1 0.05	Vias A Amplifier	110	- 6.6	110	1.4 1.1	10.0 8.5	100000 110000	2200 2000	8000 8000	0.40 0.33	
354	Power Amplifier Pentode	8D	7BA	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	90	- 7	67.5	1.4 1.1	7.4 6.1	100000 100000	1575 1425	8000 8000	0.27 0.235	
3V4	Power Amplifier Pentode	8C	6BX	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	90	- 4.5	90	2.1 1.7	9.5 7.7	100000 120000	2150 2000	10000 10000	0.27 0.24	
4AU6	Sharp-Cutoff Pentode	8C	7BK	He	4.2	0.45	Class A Amplifier	180	Cath. Bias	100	2.1 4.3	5 10.6	500000 1	3900 5200	Cath. Bias Res., 150 ohms Cath. Bias Res., 68 ohms		
								250	Cath. Bias	150	2.1	7.5	800000	5700	Cath. Bias Res., 180 ohms		
4BC5	Sharp-Cutoff Pentode	8D	7BD	He	4.2	0.45	Class A Amplifier	250	Cath. Bias	150	2.1	7.5	800000	5700	Cath. Bias Res., 180 ohms		
4BC8	Medium-Mu Twin-Triode	8Da	9A1	He	4.2	0.6	Each Unit as Class A Amplifier	150	Cath. Res., 220 ohms			10	—	6200	35	—	
4BN6	Beam Tube	8I	7DF	He	4.2	0.45	Limiter and Discriminator	Max. DC Plate Volts, 300		Max. Cathode Mn., 11.5		Max. Grid No. 2 Volts, 100		Max. Peak Heater Cathode Volts, 90			
4BQ7-A	Medium-Mu Twin-Triode	8Da	9AJ	He	4.2	0.6	Each Unit as Class A Amplifier	150	Cathode Bias Res., 220 ohms			9.0	6100	6400	39	Grid-No. 1 Volts for Cutoff, -10	
								250	- 1	—	—	16	—	10000	—	—	—
4BS8	Medium-Mu Twin Triode	8Da	9A1	He	4.5	0.6	Each Unit as Class A Amplifier	150	Cath. Bias	—	—	10	5000	7200	36	Cath. Bias Res., 220 ohms	
								180	—	67.5	6.5	—	—	—	—	—	—
4BU8	Sharp-Cutoff Twin Pentode	8Ia	9FD	He	4.2	0.45	Class A Amplifier With both sections operating	100	—	67.5	6.5	—	—	—	—	Grid-No. 3, volts, each section, -10	
								100	—	67.5	3.3	2.2	—	—	—	—	—
								: Grid current adjusted for 100 microamperes DC									
4BZ6	Semi-cutoff Pentode	8D	7CM	He	4.2	0.45	Class A Amplifier	200	Cath. Bias	150	2.6	11	600000	6100	Cath. Bias Res., 180 ohms		
4BZ7	Medium-Mu Twin-Triode	8Da	9AJ	He	4.2	0.6	Each Unit as Class A Amplifier	150	Cathode Bias Res., 220 ohms			10	5000	6800	38	Grid-No. 1 Volts for Cutoff, -10	
4CB6	Sharp-Cutoff Pentode	8D	7CM	He	4.2	0.45	Class A Amplifier	200	Cath. Bias	150	2.8	9.5	600000	6200	Cath. Bias Res., 180 ohms		
4CS6	Pentagrid Amplifier	8D	7CH	He	4.2	0.45	Sync Separator and Sync Clipper	10	—	30	4.5	2	Grid-No. 3 Volts, 0 Grid-No. 1 Volts, 0		—	—	
								100	- 1	30	5.5	0.8	700000	—	Grid-No. 3 Volts, 1 Transcond., 1500 μ mbars Grid-No. 3 Volts, 0 Transcond., 0 μ mbars		
4DE6	Sharp-Cutoff Pentode	8D	7CM	He	4.2	0.45	Class A Amplifier	100	—	30	1.3	1	1100	—	—	—	
								200	Cath. Bias	150	2.8	9.5	600000	6200	Cath. Bias Res., 180 ohms		

4DT6	Sharp-Cutoff Pentode	80	7CM	He	4.2	0.45	Class A Amplifier	150	Cath. Bias	100	2.1	1.1	150000	515	Cath. Bias Res., 560 ohms			
							FM Detector	250	Cath. Bias	100	5.5	0.22	Grid-No. 3 Volts, -6; Cath. Res., 560 ohms Plate Load Resistor, 27000 Ω					
4EW6	Sharp-Cutoff Pentode	80	7CM	He	4.2	0.6	Class A Amplifier	125	Cath. Bias	125	3.2	11	200000	14000	Cath. Bias Res., 56 ohms			
5AM8	Diode—Sharp-Cutoff Pentode	80a	9CY	He	4.7	0.6	Diode Unit	Max. DC Plate Ma., 5					Max. Peak Heater-Cathode Volts, \approx 200					
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.7	11.5	—	7000	Cath. Bias Res., 120 ohms			
5AN8	Medium-Mu Triode—Sharp-Cutoff Pentode	80a	9DA	He	4.7	0.6	Triode Unit as Class A Amplifier	200	— 6	—	—	13	5750	3300	19	—	—	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.8	9.5	300000	6200	Cath. Bias Res., 180 ohms			
5AQ5	Beam Power Tube	81	7BZ	He	4.7	0.6	Single Tube Class A Amplifier	180	— 8.5	180	3.0	29.0	50000	3700	—	—	5500	2.0
							Push-Pull Class AB ₁ Amplifier	250	— 12.5	250	4.5	45.0	52000	4100	—	—	5000	4.5
							Class AB ₁ Amplifier	250	— 15	250	5.0	70	60000	—	—	—	10000	10
5AS4 5AS4-A	Full-Wave Rectifiers	E3 D6	8T1	H	4.7	3.0	With Capacitive-Input Filter	Max. AC Volts per Plate (RMS), 550			Max. DC Output Ma., 390			Min. Total Effect. Supply Imped. per Plate, 97 ohms				
							With Inductive-Input Filter	Max. AC Volts per Plate (RMS), 550			Max. DC Output Ma., 275			Min. Value of Input Choke, 10 henries				
5AS8	Diode—Sharp-Cutoff Pentode	80a	908	He	4.7	0.6	Diode Unit	Max. Peak Inverse Plate Volts, 330					Max. Average Plate Ma., 3.0					
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	3.0	9.5	300000	6300	Cath. Bias Res., 180 ohms			
5AT8	Triode—Pentode Converter	80a	9DW	He	4.7	0.6	Triode Unit as 250-Mc. Oscillator	150	Grid Resistor, 2700 ohms			Grid Current, 3.6 Ma.			Plate Current, 13 Ma. Power Output (Approx.), 0.5 Watt			
							Pentode Unit as Mixer	150	Grid-No. 2 Volts, 150			Mixer Grid-No. 1 Supply Volts, -3.5			Osc. Volts at Mixer Grid-No. 1 (RMS), 2.6			Mixer Grid-No. 1 Resistor, 120000 ohms Conversion Transconductance, 2100 μ hos
5AV8	Medium-Mu Triode—Sharp-Cutoff Pentode	80a	9DZ	He	4.7	0.6	Triode Unit as Class A Amplifier	200	— 6	—	—	13	5750	3300	19	—	—	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.8	9.5	300000	6200	Cath. Bias Res., 180 ohms			
5AZ4	Full-Wave Rectifier	C2	8T	F	5.0	2.0	For ratings and characteristics, refer to Type 5Y3-GT.											
5B8	Medium-Mu Triode—Sharp-Cutoff Pentode	80a	9EC	He	4.7	0.6	Triode Unit as Class A Amplifier	200	— 6	—	—	13	5750	3300	19	—	—	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.8	9.5	300000	6200	Cath. Bias Res., 180 ohms			
5BE8	Medium-Mu Triode—Sharp-Cutoff Pentode	80a	9EO	He	4.7	0.6	Triode Unit as Class A Amplifier	150	Cath. Bias Res., 56 ohms			18	5000	8500	40	—	—	
							Pentode Unit as Class A Amplifier	250	Cath. Bias	110	3.5	10	400000	5200	Cath. Bias Res., 68 ohms			

Discontinued types are shown in light face.



Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use <small>Values to right give operating conditions and characteristics for indicated typical use</small>	Plate Supply Vols	Grid Bias Vols	Screen Supply Vols	Screen Current Ma	Plate Current Ma	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ hos	Amplification Factor	Load or Stand Power Output Ohms	Power Output Watts
		Diagn.	I.C.	C.T.	Watts	Ampl.											
5BK7-A	Medium-Mu Twin Triode	80a	9AJ	HO	4.7	0.6	Each Unit as Class A Amplifier	150		Cath. Bias Res., 56 ohms		18	4600	9300	43	Grid No. 1 Volts for Cutoff, -10	
5BQ7-A	Medium-Mu Twin Triode	80a	9AJ	HO	4.7	0.45	Each Unit as Class A Amplifier	150		Cath. Bias Res., 220 ohms		9	6100	6400	39	Grid No. 1 Volts for Cutoff, -10	
5BR8	Medium-Mu Triode Sharp-Cutoff Pentode	80a	9FA	HO	4.7	0.6	Triode Unit as Class A Amplifier	150	Cath. Bias			18	5000	8500	40	Cath. Bias Res., 56 ohms	
							Pentode Unit as Class A Amplifier	250	Cath. Bias	110	3.5	10	400000	5200		Cath. Bias Res., 68 ohms	
5BT8	Twin-Diode-Sharp-Cutoff Pentode	80a	9HE	HO	4.7	0.6	Class A Amplifier	200	Cath. Bias	150	2.8	9.5	300000	6200		Cath. Bias Res., 180 ohms	
5CG8	Triode Pentode Converter	80a	9OF	HO	4.7	0.6	Triode Unit as 250-Mc Oscillator	150	Grid Resistor, 2700 ohms Grid Current, 3.6 Ma.			Plate Current, 13 Ma. Power Output (Approx.) 0.5 watt					
							Pentode Unit As Mixer	150	Conversion Transconductance, 2100 μ hos Grid-No. 2 Volts, 150 Mixer Grid No. 1 Supply Volts, -3.5			Plate Current, 6.2 Ma. Osc. Volts at Mixer Grid-No. 1 (RMS), 2.6 Mixer Grid-No. 1 Resistor, 120000 ohms					
							Triode Unit as Class A Amplifier	100	Cath. Bias			8.5	6900	5800	40	Cath. Bias Res., 100 ohms	
							Pentode Unit as Class A Amplifier	250	Cath. Bias	150	1.6	7.7	750000	4600		Cath. Bias Res., 200 ohms	
5CL8 5CL8-A	Medium-Mu Triode Sharp-Cutoff Tetrode	80a	9FX	HO	4.7	0.6	Triode Unit as Class A Amplifier	125	Cath. Bias			15	5000	8000	40	Cath. Bias Res., 56 ohms	
							Tetrode Unit as Class A Amplifier	125	- 1	125	4	12	100000	Transcond. 5800 μ hos for 5CL8 Transcond. 6400 μ hos for 5CL8-A			
5CM8	High-Mu Triode-Sharp-Cutoff Pentode	80a	9FZ	HO	4.7	0.6	Triode Unit as Class A Amplifier	250	- 2			1.8	50000	2000	100		
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.8	9.5	600000	6200		Cath. Bias Res., 180 ohms	
5CQ8	Medium-Mu Triode Sharp-Cutoff Tetrode	80a	9GE	HO	4.7	0.6	Triode Unit as Class A Amplifier	125	Cath. Bias			15	5000	8000	40	Cath. Bias Res., 56 ohms	
							Tetrode Unit as Class A Amplifier	125	- 1	125	4.2	12	140000	5800			
5CZ5	Beam Power Tube	81a	9HN	HO	4.7	0.6	Vertical Deflection Amplifier	Max. DC Plate Volts, 315 Max. Peak Cathode Ma., 140			Max. Peak Positive Pulse Plate Volts, 2200 (Abs.) Max. Plate Dissipation, 10 watts						
							Class A Amplifier	250	- 24	250	4.6	46	73000	4800		5000	5.4
							Push-Pull Class AB ₁ Amplifier	350	- 23.5	280	3	46				7500	21.5

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values in right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Milli-mhos) Ma/Volts	Amplification Factor	Load for Rated Power Output Ohms	Power Output Watts		
		Blk.	S.C.	C.T.	Volts	App.													
6AG7	Power Pentode	C2a	8V	H	6.3	0.65	Class A Amplifier 4-Mc. Band-width Video Circuit	300	Cath. Bias - 2.0	135	7.0	28.0					Cathode-Bias Resistor, 57 ohms. Load Resistance, 3500 ohms. Peak-to-Peak Volts Output, 140 approx.		
6AH4-GT	Medium-Mu Triode	6B	8EL	H	6.3	0.75	Vertical Deflection Amplifier	Max. DC Plate Volts, 500 Max. DC Cathode Ma., 60					Max. Peak Positive-Pulse Plate Volts, 2000 Max. Plate Dissipation, 7.5 watts						
6AH6	Sharp-Cutoff Pentode	8B	7BK	H	6.3	0.45	Class A Amplifier	300	Cath. Bias	150	2.5	10.0	500000	9000			Cath. Res., 160 ohms		
6AK5	Sharp-Cutoff Pentode	A1	70D	H	6.3	0.175	Class A Amplifier	120 180	Cath. Bias	120 120	2.5 2.4	7.5 7.7	300000 500000	5000 5100			Cath. Res., 180 ohms		
6AL5	Twin Diode	A4	6BT	H	6.5	0.3	Detector Rectifier	Max. Peak Inverse Volts, 330 Max. Peak Plate Ma. per Plate, 54					Max. DC Output Ma. per Plate, 9 Max. Peak Heater-Cathode Volts, 330						
6AL7-GT	Electron-Ray Tube Indicator Type	6B	6CH	H	6.3	0.15	Visual Indicator	Target Voltage, 315 volts Grid Voltage = 0 volts Cathode Bias Res., 3300 ohms approx.					Grid Voltage for Pattern Cutoff, -7 volts approx. Deflecting Electrodes—No. 1, No. 2 and No. 3 Voltage = 0						
6AM4	High-Mu Triode	A4a	6BX	H	6.3	0.225	Class A Amplifier	150	Cath. Bias Res., 100 ohms		7.5	9500	9000	85					
6AM8	Diode	6B	6CY	H	6.3	0.45	Diode Unit	Max. DC Plate Ma., 5										Max. Peak Heater-Cathode Volts, ±200	
6AM8-A	Sharp-Cutoff Pentodes	6B	6CY	H	6.3	0.45	Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.7	11.5		7000			Cath. Bias Res., 120 ohms		
6AN4	High-Mu Triode	A7	70K	H	6.3	0.225	Class A Amplifier	200	Cath. Bias Res., 100 ohms		13		10000	70					
							Mixer Service	125	Cath. Bias Res., 270 ohms		7		Conversion Transcond., 2900 micromhos Oscillator Injection Volts (RMS), 1.4						
6AN8	Triode—Sharp-Cutoff Pentode	6B	6DA	H	6.3	0.45	Triode Unit as Class A Amplifier	200	- 6			13.0	5750	3300	19				
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.6	9.5	300000	6300			Cath. Res., 180 ohms		
6AQ5	Beam Power Tubes	B1	7B2	H	6.3	0.45	Single Tube Class A Amplifier	180	- 6.5	180	3.0	29.0	58000	3700			5500	2.0	
Class A Amplifier							250	-12.5	250	4.5	45.0	52000	4100			5000	4.5		
Push-Pull Class AB ₁ Amplifier							250	-15.0	250	5.0	70.0	60000				10000	10.0		
6AQ6	Twin-Diode High-Mu Triode	6B	7BT	H	6.3	0.15	Triode Unit as Class A Amplifier	100	- 1.0			0.8	61000	1150	70				
							Triode Unit as Class A Amplifier	250	- 3.0			1.0	58000	1200	70				
6AQ7-GT	Twin-Diode High-Mu Triode	6B	60K	H	6.3	0.3	Triode Unit as Class A Amplifier	250	- 2			2.3	44000	1600	70				
6AR5	Power Pentode	B1	60C	H	6.3	0.4	Class A Amplifier	250	-16.5	250	5.7	34.0	65000	2400			7000	3.2	
							Class A Amplifier	250	-18	250	5.5	32.0	68000	2300			7600	3.4	
6AS5	Beam Power Tube	B1	70V	H	6.3	0.8	Class A Amplifier	150	- 8.5	110	2.0	35		5600			4500	2.2	

6A58	Diode— Sharp-Cutoff Pentode	8a	10S	H	6.3	0.45	Diode Unit		Max. Peak Inverse Plate Volts, 330				Max. Peak Plate Ma., 50		Max. Average Plate Ma., 5.0		
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	3.0	9.5	300000	6200	Cath. Res., 180 ohms		
6AT6	Twin-Diode High-Mu Triode	8B	7BT	H	6.3	0.3	Triode Unit as Class A Amplifier		100	- 1.0			0.8	54000	1300	70	
							Triode Unit as 250-Mc. Oscillator		150	- 3.0			1.0	58000	1200	70	
6AT8 6AT8-A	Triode— Pentode Converters	8Bb	8BW	H	6.3	0.45	Pentode Unit as Mixer		150	Grid Resistor, 2700 ohms Grid Current, 3.6 Ma.				Plate Current, 13 ma. Power Output (Approx.), 0.5 watt			
							150	Grid-No. 2 Volts, 150 Mixer Grid-No. 1 Supply Volts, -3.5				Osc. Volts at Mixer Grid-No. 1 (RMS), 2.6 Mixer Grid-No. 1 Resistor, 120000 ohms Conversion Transconductance, 2100 μ mborn					
6AU4-GT	Half-Wave Rectifier	C10b	40B	H	6.3	1.8	Television Dumper Service		Max. Peak Inverse Plate Volts, 4500 (Absolute) Max. Peak Plate Ma., 1050				Max. Average Plate Ma., 175 Max. Plate Dissipation, 6.0 watts				
6AU4-GTA	Half-Wave Rectifier	C10b	40C	H	6.3	1.8	Television Dumper Service		Max. Peak Inverse Plate Volts, 4500 (Absolute) Max. Peak Plate Ma., 1150				Max. Average Plate Ma., 190 Max. Plate Dissipation, 6.0 Watts				
6AU5-GT	Beam Power Tube	C2c	60K	H	6.3	1.75	Horizontal Deflection Amplifier		Max. DC Plate Volts, 550 Max. DC Cathode Ma., 110				Max. Peak Positive-Pulse Plate Volts, 5500 Absolute Max. Plate Dissipation, 10 watts				
6AU6	Sharp-Cutoff Pentode	8D	7BK	H	6.3	0.3	Class A Amplifier		100	Cath. Bias	100	2.1	5.0	500000	3900	Cath. Bias Res.,	150 ohms
							250		150	4.3	10.6	1.0 ¹	5200	Cath. Bias Res.,	68 ohms		
6AU7	Medium-Mu Twin-Triode	8Da	7A	H	3.15	0.6	Each Unit as Class A Amplifier		100	0			13	6300	3500	22	
							250	- 8.5			10.5	7950	2200	17.5			
6AU8	Medium-Mu Triode— Sharp-Cutoff Pentode	8Dc	7CX	H ¹	6.3	0.6	Triode Unit as Class A Amplifier		150	Cath. Res., 150 ohms		9.5	7200	5600	40		
							Pentode Unit as Class A Amplifier		200	Cath. Bias	125	3.6	17	140000	8000	Cath. Bias Res., 87 ohms	
6AV5-GA	Beam Power Tubes	8Da	60K	H	6.3	1.2	Horizontal Deflection Amplifier		Max. DC Plate Volts, 550 Max. DC Cathode Ma., 110				Max. Peak Positive-Pulse Plate Volts, 5500 (Abs.) Max. Plate Dissipation, 11 watts				
6AV6	Twin-Diode High-Mu Triode	8B	7BT	H	6.3	0.3	Triode Unit as Class A Amplifier		100	- 1.0			6.5	80000	1250	100	
							250	- 2.0			1.2	62500	1600	100			
6AW8 6AW8-A	High-Mu Triode— Sharp-Cutoff Pentode	8Dc	7CX	H ¹	6.3	0.6	Triode Unit as Class A Amplifier		200	- 2			4	17500	4000	70	
							Pentode Unit as Class A Amplifier**		200	Cath. Bias	150	3.5	13	400000	9000	Cath. Bias Res., 180 ohms	
6AX4-GT	Half-Wave Rectifier	C2c	40C	H	6.3	1.2	Television Dumper Service		Max. Peak Inverse Plate Volts, 4400 Max. Peak Plate Ma., 750 Max. DC Plate Ma., 125				Max. Peak Heater-Cathode Volts: -4400** +309 **DC component must not exceed 900 volts.				
							With Capacitive- Input Filter		Max. AC Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. DC Output Ma., 80 Max. Peak Plate Ma., 375		Min. Total Effec. Supply Imped. per Plate, 105		
6AX5-GT	Full-Wave Rectifier	C2c	40	H	6.3	1.2	With Inductive- Input Filter		Max. AC Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. DC Output Ma., 125 Max. Peak Plate Ma., 375				
							Triode Unit as Class A Amplifier		150	Cath. Bias Res., 56 ohms	18	5000	8500	40			
6AX8	Medium-Mu Triode— Sharp-Cutoff Pentode	8Dc	6AZ	H	6.3	0.45	Pentode Unit as Class A Amplifier		250	Cath. Bias	110	3.5	10	400000	4600	Cath. Bias Res., 120 ohms	

Discontinued types are shown in light face.



Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma	Plate Current Ma	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	
		Dimen.	S. C.	C. T.	Yells	Ampl.												
6AZ8	Medium-Mu Triode-Semiconverter-Cutoff Pentode	80a	9ED	H	6.3	0.45	Triode Unit as Class A Amplifier	200	-6	—	—	13	5750	3300	19	—	—	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	3	9.5	300000	6000	Cath. Res., 180 ohms			
							Class A Amplifier	250	-45.0	—	—	60.0	800	5250	4.2	2500	3.20	
6B4-G	Power Amplifier Triode	E2	3B	F	6.3	1.0	Push-Pull Class AB ₁ Amplifier	325	Cath. Bias, 850 ohms	—	—	80.0	—	—	—	5000	10.0	
								325	-68 volts, fixed bias	—	—	80.0	—	—	—	3000	15.0	
6B5	Three-Coupled Power Amplifier	D12a	6AS	H	6.3	0.8	Class A Amplifier	For other characteristics, refer to Type 6N6-G										
6B6-G	Twin-Diode High-Mu Triode	D8	7V1	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.										
6B7	Twin-Diode Remote-Cutoff Pentode	D8	7D	H	6.3	0.3	Pentode Unit as Amplifier	Input Triode: Plate Volts, 300 max; Grid Volts, 0; Plate Ma, 8; AF Signal Volts (Peak), 31 Output Triode: Plate Volts, 300 max; Plate Ma, 45; Plate Res., 24000 ohms; Load Resistance, 7000 ohms; Power Output, 4 watts.										
6B8	Twin-Diode Pentode	G1	9E	H	6.3	0.3	Pentode Unit as Amplifier	For other characteristics, refer to Type 12C8.										
6B8-G	Twin-Diode Remote-Cutoff Pentode	D8	9E1	H	6.3	0.3	Pentode Unit as RF Amplifier	100	-3.0	100	1.7	5.8	300000	950	—	—	—	—
							Pentode Unit as AF Amplifier	250	-3.0	125	2.3	9.0	600000	1425	—	—	—	—
								90	Cath. Bias, 3500 ohms	Screen Resistor = 1.1 meg.	Grid Resistor, 100	Gain per stage = 55						
								300	Cath. Bias, 1600 ohms	Screen Resistor = 1.2 meg.	Grid Resistor, 100	Gain per stage = 79						
6BA6	Remote-Cutoff Pentode	B0	7BK	H	6.3	0.3	Class A Amplifier	100	Cath. Bias	100	4.4	10.8	2	4300	Cath. Bias Res., 68 ohms	—	—	
								250	—	100	4.2	11.0	1.0	4400	Cath. Bias Res., 68 ohms	—	—	
6BA7	Pentagrid Converter	B1a	8CT	H	6.3	0.3	Converter	100	-1.0	100	10.2	3.6	500000	Grid-No. 1 Resistor, 20000 ohms	—	—	—	
								250	-1.0	100	10.0	3.8	1.0	Conversion Transcond., 950 micromhos	—	—	—	
6BA8-A	Medium-Mu Triode-Screen-Cutoff Pentode	B12	9DX	H	6.3	0.6	Triode Unit as Class A Amplifier	200	-8	—	—	8	6700	2700	18	—	—	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	3.5	13	400000	9210	—	—	Cath. Bias Res., 180 ohms	
6BC4	Medium-Mu Triode	A1A	9CH	H	6.3	0.225	Class A Amplifier	150	Cath. Bias	—	—	14.5	4800	10000	48	Cath. Res., 100 ohms	—	
6BC5	Screen-Cutoff Pentode	B0	7BD	H	6.3	0.3	Class A Amplifier	250	Cath. Bias	150	2.1	7.5	800000	5700	Cath. Bias Res., 180 ohms	—	—	
6BC7	Triple Diode	B8b	9AK	H	6.3	0.45	DR. Receiver in Color TV	Each Diode: Max. Peak Inverse Plate Volts, 300 Max. Peak Plate Ma., 54 Max. Average Plate Ma., 12										
6BC8	Medium-Mu Twin-Triode	B0a	9AF	H	6.3	0.4	Each Unit as Class A Amplifier	150	Cath. Res., 220 ohms	—	—	10	—	6290	35	—	—	

6BD4	Sharp-Cutoff Beam Triode	8B	8FU	H	6.3	0.6	Voltage-Control	Max. DC Plate Volts, 20000 Max. Unregulated DC Supply Volts, 40000	Max. DC Plate Ma., 1.5 Max. Plate Dissipation, 20.0 watts
6BD4-A	Sharp-Cutoff Beam Triode	8B	8FU	H	6.3	0.6	Voltage-Control	Max. DC Plate Volts, 27000 Max. Unregulated DC Supply Volts, 55000	Max. DC Plate Ma., 1.5 Max. Plate Dissipation, 25.0 watts
6BD6	Remotely-Cutoff Pentode	8D	78K	H	6.3	0.3	Class A Amplifier	100 — 1 100 5.0 13.0 150000 250 — 3 100 3.0 9.0 800000	2550 7000
6BE6	Pentagrid Converter	8B	7CH	H	6.3	0.3	Converter	100 — 1.5 100 7.0 2.6 400000 250 — 3.5 100 6.8 2.9 1.0j	Grid #1 Resistor, 20000 ohms Conversion Transcond., 475 micromhos
6BF5	Beam Power Tube	8I	78Z	H	6.3	1.2	Class A Amplifier Vertical Deflection Amplifier	110 — 7.5 110 4.0 36.0 12000	7500 2500 1.8
6BF6	Twin-Diode Medium-Mu Triode	8D	78T	H	6.3	0.3	Triode Unit as Class A Amplifier	250 — 9.0 — — 9.5	8500 1900 16 Power Output, 300 milliwatts
6BG6-G 6BG6-GA	Beam Power Tubes	PT E	88T	H	6.3	0.9	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Cathode Ma., 110	Max. Peak Positive Pulse Plate Volts, 6600 (Abs.) Max. Plate Dissipation, 70 watts
6BH6	Sharp-Cutoff Pentode	8D	7CM	H	6.3	0.15	Class A Amplifier	100 — 1.0 100 1.4 3.6 700000 250 — 1.0 150 2.9 7.4 1.4j	3400 4600
6BH8	Medium-Mu Triode—Sharp-Cutoff Pentode	8Ta	80K	H	6.3	0.6	Triode Unit as Class A Amplifier Pentode Unit as Class A Amplifier	150 — 5 — — 9.5 200 Cath. Bias 125 3.4 15 150000	5150 3300 17 Cath. Bias Res., 82 ohms
6BJ6	Remotely-Cutoff Pentode	8B	7C8	H	6.3	0.15	Class A Amplifier	100 — 1.0 100 3.5 9.0 250000 250 — 1.0 100 3.3 9.2 1.3j	3650 3600
6BJ7	Triode Diode	8Ba	9AX	H	6.3	0.45	DC Restorer in Color TV	Each Diode: Max. Peak Inverse Plate Volts, 330 Max. Peak Plate Ma., 10	Max. Average Plate Ma., 1
6BJ8	Twin Diode Medium-Mu Triode	8Ta	88R	H	6.3	0.6	Triode Unit as Class A Amplifier Triode Unit as Vertical Deflection Amplifier	90 0 — — 13.5 4700 4700 22 250 — 9 — — 8 7150 2800 20	Max. DC Plate Volts, 300 Max. Peak Cathode Ma., 70 Max. Peak Positive Pulse Plate Volts, 1200 (Abs.) Max. Plate Dissipation, 3.5 watts
6BK4	Sharp-Cutoff Beam Triode	8Ta	80C	H	6.3	0.2	Voltage-Control	Max. DC Plate Volts, 25000 Max. Unregulated DC Supply Volts, 55000	Max. DC Plate Ma., 1.5 Max. Plate Dissipation, 25 Watts
6BK5	Beam Power Tube	8Ta	88Q	H	6.3	1.2	Class A Amplifier	250 — 5 250 3.5 35 100000	8500 — 6500 3.5
6BK7-A 6BK7-B	Medium-Mu Twin Triodes	8Ba	88J	H H	6.3	0.45	Each Unit as Class A Amplifier	150 Cathode Bias Res., 56 ohms 18 4600 9300 43	Grid-No. 1 Volts for Cutoff, -11
6BL4	Half-Wave Rectifier	D11b	808	H	6.3	3.0	Television Damper Service	Max. Peak Inverse Plate Volts, 4500 (Abs.) Max. Peak Plate Ma., 1200 Max. DC Plate Ma., 200	Max. Peak Heater-Cathode Volts, -4500* (Abs.) +300 *DC component not to exceed -900 volts
6BL7-GT	Medium-Mu Twin Triode	C2r	88D	H	6.3	1.5	Vertical Deflection Amplifier	Max. DC Plate Volts, 500 Max. DC Cathode Ma. (Each Unit), 60	Max. Peak Positive-Pulse Plate Volts, 1800 Max. Plate Dissipation (Each Unit), 10 watts

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) umhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Diagn.	S.C.	C.T.	Volts	Amp.											
6BL7-GTA	Medium-Mu Twin Triode	C21	80D	H	6.3	1.5	Vertical Deflection Amplifier (See No. 6)	Max. DC Plate Volts, 500	Max. Peak Positive-Pulse Plate Volts, 2000 (Abs.)								
							Vertical Deflection Oscillator (See No. 11)	Max. DC Cathode Ma., 60	Max. Plate Dissipation, 10 watts								
6BN4	Medium-Mu Triode	80	7EG	H	6.3	0.2	Class A Amplifier	150	Cathode Bias Res., 150 ohms		9	6300	6800	43			
6BN4-A	Medium-Mu Triode	80	7EG	H	6.3	0.2	Class A Amplifier	150	Cath. Bias Res., 220 ohms			6400	8000	43			
6BN6	Beam Power Tube	81	7DF	H	6.3	0.3	Limiter and Discriminator	Max. DC Plate Volts, 300		Max. Cathode Ma., 11.5		Max. Grid-No. 2 Volts, 100					
6BN8	Twin-Diode High-Mu Triode	81A	9ER	H	6.3	0.6	Triode Unit as Class A Amplifier	100	- 1			1.5	21000	3500	75		
							Class A Amplifier	250	- 3			1.6	28000	2500	70		
6BQ5	Beam Power Tube	C0A	9CV	H	6.3	0.76	Class A Amplifier	250	- 7.3	250	5.5	48	38000	11200		4500	5.7
							Push-Pull Class AB ₁ Amplifier	250		250	7.4	62	Cath. Bias Res., 130 ohms		8000	111	
								300		300	8.4	72	Cath. Bias Res., 130 ohms		8000	177	
6BQ6-GT	Beam Power Tube	C11	6AM	H	6.3	1.2	Horizontal Deflection Amplifier	Max. DC Plate Volts, 550		Max. DC Cathode Ma., 110		Max. Peak Positive-Pulse Plate Volts, 5500 (Abs.)					
6BQ6-GTB/6CU6	Beam Power Tube	C11	6AM	H	6.3	1.2	Horizontal Deflection Amplifier	Max. DC Plate Volts, 600		Max. DC Cathode Ma., 112.5		Max. Peak Positive-Pulse Plate Volts, 6000 (Abs.)					
													Max. Plate Dissipation, 11 watts				
6BQ7	Medium-Mu Twin Triode	80A	9AJ	H	6.3	0.4	Each Unit as Class A Amplifier	150	Cathode Bias Res., 220 ohms		9.0	5800	6000	35	Grid No. 1 Volts for Cutoff, -10		
6BQ7-A	Medium-Mu Twin Triode	80A	9AJ	H	6.3	0.4	Each Unit as Class A Amplifier	150	Cathode Bias Res., 220 ohms		9.0	6100	6400	39	Grid-No. 1 Volts for Cutoff, -10		
6BR8	Medium-Mu Triode Sharp-Cutoff Pentode	80A	9FA	H	6.3	0.4	Triode Unit as Class A Amplifier	150	Cath. Bias			18	5000	8500	40	Cath. Bias Res., 56 ohms	
							Pentode Unit as Class A Amplifier	250	Cath. Bias	110	3.5	10	40000	5200		Cath. Bias Res., 68 ohms	
							Class A Amplifier	250	- 1			16		10000			
6BS8	Medium-Mu Twin Triode	80B	9AJ	H	6.3	0.4	Each Unit as Class A Amplifier	150	Cath. Bias			10	5000	7200	36	Cath. Bias Res., 220 ohms	
6BU8	Sharp-Cutoff Twin Pentode	81A	9FG	H	6.3	0.3	Class A Amplifier	100		67.5	6.5		Grid-No. 3 volts, each section, - 10				
							With Both Sections Operating	100		67.5	3.3	2.2	Grid No. 3 volts, each section, 0				

* Grid current adjusted for 100 microamperes DC



Type

Name

Tube Dimensions and Socket Connections

Cathode Type and Rating

Use

Values to slight glass operating conditions and characteristics for indicated typical use

Plate Supply Volts

Grid Bias Volts

Screen Supply Volts

Screen Current Ma.

Plate Current Ma.

AC Plate Resistance Ohms

Trans-conductance (Self-plate) μ ohms

Amplification Factor

Load for Stated Power Output Ohms

Power Output Watts

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Self-plate) μ ohms	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Dim.	S.C.	C.T.	Volts	Amp.											
6CD6-G 6CD6-GA	Beam Power Tubes	F1 60	8BT	H	6.3	2.5	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Cathode Ma., 200		Max. Peak Positive-Pulse Plate Volts, 7000 Max. Plate Dissipation, 20 watts							
6CF6	Sharp-Cutoff Pentode	80	7CB	H	6.3	0.3	Class A Amplifier	200	- 6.5	150	2.8	9.5	600000	6200	Cath. Bias Res., 180 ohms		
6CG7	Medium-Mu Triode-Triode	81a	9AJ	100	6.3	0.6	Horizontal Deflection Oscillator Vertical Deflection Oscillator	Max. DC Plate Volts, 300 Max. Peak Neg.-Pulse Grid Volts, 600		Max. DC Cathode Ma., 300 Max. DC Cathode Ma., 20		Max. Peak Cathode Ma., 300 Max. Peak Cathode Ma., 70		Max. Dissipation (Watts) either plate, 3.5 both plates, 5			
6CG8 6CG8-A	Triode Pentode Converter	80a	90F	H 100	6.3	0.45	Triode Unit as 250-Mc. Oscillator Pentode Unit as Mixer	150	Grid Resistor, 2700 ohms Grid Current, 3.6 ma.		Plate Current, 13 ma. Power Output (Approx.), 0.5 watt						
6CH8	Medium-Mu Triode Sharp-Cutoff Pentode	80a	9PT	H	6.3	0.45	Triode Unit as Class A Amplifier	100	Cath. Bias	—	—	8.5	6900	5800	40	Cath. Bias Res., 100 ohms	
							Pentode Unit as Class A Amplifier	350	Cath. Bias	150	1.6	7.7	750000	4600	—	Cath. Bias Res., 200 ohms	
6CK4	Low-Mu Triode	65	8J8	H	6.3	1.25	Triode Unit as Class A Amplifier Pentode Unit as Class A Amplifier	200	- 6	—	—	13	5750	3300	19	—	
6CL6	Power Pentode	81a	90V	H	6.3	0.65	Vertical Deflection Amplifier Class A Amplifier 1-Mc. Bandwidth Video Circuit	Max. DC Plate Volts, 550 Max. Peak Cathode Ma., 350		Max. Peak Positive Pulse Plate Volts, 2000 (Abs.) Max. Plate Dissipation, 12 watts Load Resistor, 3900 ohms Peak-to-Peak Grid-No. 1 Signal Volts, 3 Peak-to-Peak Output Volts, 132 approx.							
6CL8	Medium-Mu Triode Sharp-Cutoff Tetrode	80a	9FX	H	6.3	0.45	Triode Unit as Class A Amplifier	125	Cath. Bias	—	—	25	5000	8000	40	Cath. Bias Res., 56 ohms	
6CL8-A	Medium-Mu Triode Sharp-Cutoff Tetrode	80a	9FX	100	6.3	0.45	Tetrode Unit as Class A Amplifier	125	- 1	125	4	12	100000	5800	—	—	
							Triode Unit as Class A Amplifier Tetrode Unit as Class A Amplifier	125	Cath. Bias Res., 56 ohms		15	5000	8000	40	—	—	

6CM6	Beam Power Tube	81a	9CK	H	6.3	0.45	Class A Amplifier	180	-8.5	180	3	29	50000	3700	-----	5500	2	
							Vertical Deflection Amplifier	315	-13	225	2.2	34	80000	3750	-----	8500	5.5	
6CM7	Dual Triode With Dissimilar Units	81a	9E5	H	6.3	0.6	Vertical Deflection Oscillator (1.5a, 2a, 3)	Max. DC Plate Volts, 315		Max. Peak Positive-Pulse Plate Volts, 2000 (Abs.)		Max. DC Cathode Ma., 140		Max. Plate Dissipation, 8 watts				
							Vertical Deflection Amplifier (1.5a, 2a, 3)	Max. DC Plate Volts, 500		Max. Peak Negative-Pulse Grid Volts, 200		Max. DC Cathode Ma., 70		Max. Plate Dissipation, 1.25 watts		Max. Peak Cathode Ma., 15		Max. Peak Neg.-Pulse Grid Volts, 200
6CM8	High-Mu Triode—Sharp-Cutoff Pentode	80a	9F2	H	6.3	0.45	Triode Unit as Class A Amplifier	250	-2	-----	-----	1.8	50000	2000	100	-----	-----	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.8	9.5	600000	6200	Cath. Bias Res., 180 ohms			
6CN7	Twin Diode High-Mu Triode	80a	9EN	H	6.3	0.3	Triode Unit as Class A Amplifier	100	-1	-----	-----	0.6	54000	1300	70	-----	-----	
							Triode Unit as Class A Amplifier	250	-3	-----	-----	1	58000	1200	70	-----	-----	
6CQ8	Medium-Mu Triode Sharp-Cutoff Tetrode	80a	9GE	H	6.3	0.45	Triode Unit as Class A Amplifier	125	Cath. Bias	-----	-----	15	5000	8000	40	Cath. Bias Res., 56 ohms		
							Tetrode Unit as Class A Amplifier	125	-1	125	4.2	12	140000	5800	-----	-----	-----	
6CR6	Diode Remote-Cutoff Pentode	80	7EA	H	6.3	0.3	Pentode Unit as Class A Amplifier	250	-2	100	3	9.5	200000	1950	-----	-----	Grid-No. 1 Volts for transcond. of 10 micromhos, -40	
6CS6	Pentagrid Amplifier	80	7CH	H	6.3	0.3	Syn. Separator and Syn. Clipper	10	-----	30	6.5	2	-----	-----	Grid-No. 3 Volts, 0	Grid-No. 1 Volts, 0	-----	-----
							Class A Amplifier	100	-1	30	5.5	0.8	700000	-----	Grid-No. 3 Volts, -1	Transcond., 1500 μ mhos	Grid-No. 3 Volts, 0	Transcond., 0 μ mhos
6CS7	Dual Triode With Dissimilar Units	81a	8E7	H	6.3	0.6	Vertical Deflection Oscillator (1.5a, 2a, 3)	Max. DC Plate Volts, 500		Max. Peak Positive-Pulse Plate Volts, 2200 (Abs.)		Max. Peak Cathode Ma., 70		Max. DC Cathode Ma., 15		Max. Plate Dissipation, 1.25 watts		
							Vertical Deflection Amplifier (1.5a, 2a, 3)	Max. DC Plate Volts, 500		Max. Peak Negative-Pulse Grid Volts, 400		Max. Peak Neg.-Pulse Grid Volts, 250		Max. Peak Cathode Ma., 105				
6CUB	Beam Power Tube	81	7CV	H	6.3	1.2	Class A Amplifier	120	-8	110	4	49	10000	7500	-----	2500	2.3	
6CU8	Medium-Mu Triode Sharp-Cutoff Pentode	80a	90M	H	6.3	0.45	Triode Unit as Class A Amplifier	200	-6	-----	-----	13	5750	3300	19	-----	-----	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	150	2.8	9.5	300000	6200	-----	Cath. Bias Res., 180 ohms		
6CX8	Medium-Mu Triode—Sharp-Cutoff Pentode	81a	80X	H	6.3	0.75	Triode Unit as Class A Amplifier	150	Cath. Bias Res., 150 ohms	-----	-----	9.2	8700	4600	40	-----	-----	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	125	5.2	24	70000	10000	Cath. Bias Res., 68 ohms			
6CY5	Sharp-Cutoff Tetrode	80	7EW	H	6.3	0.3	Class A Amplifier	125	-1	80	1.5	10	100000	8000	-----	-----	-----	

Discontinued types are shown in light face.



Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) u-mhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Diam.	1 C.	C.T.	Volts	Temp.											
6CY7	Dual Triode With Dissimilar Units	81a	9LG	H	6.3	0.75	Vertical Deflection Oscillator (See Sec. 1)	Max. Peak Neg. Pulse Grid Volts, 400		Max. Plate Dissipation, 1 watt							
							Vertical Deflection Amplifier (See Sec. 2)	Max. DC Plate Volts, 350		Max. Peak Pos. Pulse Plate Volts, 1800		Max. Peak Neg. Pulse Grid Volts, 750		Max. Plate Dissipation, 5.5 watts Max. DC Plate Volts, 350			
6CZ5	Beam Power Tube	81a	4HN	H	6.3	0.45	Vertical Deflection Amplifier	Max. DC Plate Volts, 315		Max. Peak Positive-Pulse Plate Volts, 2200 (Abs.) Max. Plate Dissipation, 10 watts							
							Class A Amplifier	250	-14	250	4.6	46	73000	4800	—	5000	5.4
							Class AB Amplifier	350	-23.5	280	3	46	—	—	—	7500	21.5
6D6	Remote-Cutoff Pentode	D13a	6F	H	6.3	0.3	Amplifier Mixer	For other characteristics, refer to Type 6U7-G.									
6D7	Sharp-Cutoff Pentode	D13a	7H	H	6.3	0.3	Amplifier Detector	For other characteristics, refer to Type 6J7.									
6D8-G	Pentagrid Converter	D8	8A1	H	6.3	0.15	Converter	135	- 3.0	67.5	1.7	1.5	60000	Anode-Grid (#2): 250 ohms max. volts, 4.3 ma. Oscillator-Grid (#1) Resistor Conversion Transcond., 550 micromhos.			
								250	- 3.0	100	2.6	3.5	408800	Max. Average Plate Ma., 155 Max. Plate Dissipation, 5.5 watts			
6DA4	Half-Wave Rectifier	C2r	4CG	H	6.3	1.2	Television Damper Service	Max. Peak Inverse Volts, 4500 (Abs.)		Max. Peak Plate Ma., 1100 Max. Peak Heater-Cathode Volts, 5000 (DC Component Not to Exceed 900 Volts) Max. Peak Mixer Cathode Volts, 300 (DC Component Not to Exceed 100 Volts) Max. DC Plate Ma., 175							
6DC6	Semiremote-Cutoff Pentode	8C	7CM	H	6.3	0.3	Class A Amplifier	200	Cath. Bias	150	3.0	9.0	500000	5500	Cath. Bias Res., 180 ohms		
6DE4	Half-Wave Rectifier	C10b	4CG	H	6.3	1.6	Television Damper Service	Max. Peak Inverse Plate Volts, 5000		Max. Peak Plate Ma., 1100							
								Max. Peak Heater-Cathode Volts, 5000 (DC Component Not to Exceed 900 Volts)		Max. Peak Mixer Cathode Volts, 300 (DC Component Not to Exceed 100 Volts)		Max. DC Plate Ma., 175					
6DE6	Sharp-Cutoff Pentode	8C	7CM	H	6.3	0.3	Class A Amplifier	200	Cath. Bias	150	2.8	9.5	0.65	6200	Cath. Bias Res., 180 ohms		
6DE7	Dual Triode With Dissimilar Units	81a	94F	H	6.3	0.95	Vertical Deflection Oscillator (See Sec. 1)	Max. Peak Neg. Pulse Grid Volts, 400		Max. Plate Dissipation, 1.5 watts							
							Vertical Deflection Amplifier (See Sec. 2)	Max. Peak Heater-Cathode Ma., 77		Max. DC Plate Volts, 330		Max. Peak Pos. Pulse Plate Volts, 1500 (Abs.)		Max. Plate Dissipation, 7 watts Max. DC Plate Volts, 275			
6DG6-GT	Beam Power Tube	C2c	7S	H	6.3	1.2	Class A Amplifier	110	- 7.5	110	4	49	13000	8000	—	2000	2.1
								200	Cath. Res. 180 ohms	125	2.2	46	28000	8000	—	4000	3.8
6DK6	Sharp-Cutoff Pentode	8C	7CM	H	6.3	0.3	Class A Amplifier	125	Cath. Bias	125	3.8	12	350000	9800	Cath. Bias Res., 56 ohms		

6DN6	Beam Power Tube	E	8BT	H	6.3	2.5	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Cathode Ma., 200	Max. Peak Positive-Pulse Plate Volts, 6600 (Abs.) Max. Plate Dissipation, 15 watts							
6DN7	Dual Triode With Dissimilar Units	C0	8BD	H	6.3	0.9	Vertical Deflection Oscillator (as No. 1)	Max. Peak Neg.-Pulse Grid Volts, 400 Max. DC Plate Volts, 350	Max. Plate Dissipation, 1 watt							
							Vertical Deflection Amplifier (as No. 2)	Max. Peak Pos.-Pulse Plate Volts, 2500 Max. Peak Neg.-Pulse Grid Volts, 250 Max. Peak Cathode Ma., 150	Max. Plate Dissipation, 10 watts Max. DC Plate Volts, 550							
6DQ5	Beam Power Tube	D11	8JC	H	6.3	2.5	Horizontal Deflection Amplifier	Max. DC Plate Volts, 900 Max. DC Cathode Ma., 285	Max. Peak Positive-Pulse Plate Volts, 7000 (Abs.) Max. Plate Dissipation, 24 watts							
6DQ6-A	Beam Power Tube	D6	8AM	H	6.3	1.2	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Cathode Ma., 140	Max. Peak Positive-Pulse Plate Volts, 6000 (Abs.) Max. Plate Dissipation, 15 watts							
6DR7	Dual Triode With Dissimilar Units	81a	8HF	H	6.3	0.9	Vertical Deflection Oscillator	Unit No. 1: Max. DC Plate Volts, 330 Max. Peak Cathode Ma., 70	Max. Peak Neg.-Pulse Grid Volts, 400 Max. Plate Dissipation, 1 watt							
							Vertical Deflection Amplifier	Unit No. 2: Max. DC Plate Volts, 275 Max. Peak Pos.-Pulse Plate Volts, 1500 Max. Plate Dissipation, 7 watts	Max. Peak Neg.-Pulse Grid Volts, 250 Max. Peak Cathode Ma., 175							
6DS5	Beam Power Tube	81	7BZ	H	6.3	0.8	Class A Amplifier	200 — 7.5 200 3 35 250 — 8.5 200 3 29	28000	6000	6000	3				
6DT5	Beam Power Tube	81a	8HN	H	6.3	1.2	Vertical Deflection Amplifier	Max. DC Plate Volts, 315 Max. Peak Cathode Ma., 190	Max. Peak Positive-Pulse Plate Volts, 2700 (Abs.) Max. Plate Dissipation, 9 watts							
6DT6	Sharp-Cutoff Pentode	80	7CM	H	6.3	0.3	Class A Amplifier	150	Cath. Bias	100	2.1	1.1	150000	515	Cath. Bias Res., 560 ohms	
							FM Detector	250	Cath. Bias	100	5.5	0.22	Grid-No. 3 Volts, -6; Cath. Res., 560 ohms Plate Load Resistor, 270000 ohms			
6DT8	High-Mu Twin Triodes	80a	9OE	H	6.3	0.3	Class A Amplifier	100	Cath. Bias Res., 270 ohms	3.7	15000	4000	60			
								250	Cath. Bias Res., 200 ohms	10	10900	5500	60			
6E5	Electron-Ray Tube	D4	8F1	H	6.3	0.3	Visual Indicator	Plate & Target Supply = 125 volts. Triode Plate Resistor = 1.0 meg. Target Current = 0.8 ma. Grid Bias, -4.0 volts; Shadow Angle, 0°. Bias, 0 volts; Angle, 90°; Plate Current, 0.1 ma. Plate & Target Supply = 250 volts. Triode Plate Resistor = 1.0 meg. Target Current = 2.0 ma. Grid Bias, -7.5 volts; Shadow Angle, 0°. Bias, 0 volts; Angle, 90°; Plate Current, 0.2 ma.								
								180	-20.0			Power Output is for one tube at stated plate-to-plate load			15000	0.75
								250	-27.5						14000	1.60
6E7	Remote-Cutoff Pentode	D13a	7H	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6U7-G.								
6EA8	Triode-Pentode Converter	80b	8AC	H	6.3	0.45	Triode Unit as Class A Amplifier	150	Cath. Bias			18	5000	8500	40	Cath. Bias Res., 56 ohms
							Pentode Unit as Class A Amplifier	125	- 1	125	4	12	80000	6400		
6EB8	High-Mu Triode—Sharp-Cutoff Pentode	81a	8DX	H	6.3	0.75	Triode Unit as Class A Amplifier	250	- 2			2	37000	2700	100	
							Pentode Unit as Class A Amplifier	200	Cath. Bias	125	7	25	75000	12500	Cath. Bias Res., 68 ohms	
6EH5	Power Pentode	81	7CV	H	6.3	1.2	Class A Amplifier	110	Cath. Res., 62 ohms	115	11.5	42	11000	14600	8000	3.4

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Ømm.	L.C.	G.T.	Volts	Imp.											
6EH8	Medium-Mu Triode—Sharp-Cutoff Pentode	9B6	930	H6	6.3	0.45	Triode Unit as Class A Amplifier	125	-1	—	—	13.5	—	7500	40	—	—
							Pentode Unit as Class A Amplifier	125	-1	125	4	12	170000	6000	—	—	—
6EM5	Beam Power Tube	C6b	89MM	H	6.3	0.8	Vertical Deflection Amplifier	Max. DC Plate Volts, 315				Max. Peak Positive Pulse Plate Volts, 2200 (Abs.)					
							Class A Amplifier	250	-18	250	3	36	—	5100	8.7	—	—
6EW6	Sharp-Cutoff Pentode	B0	7CM	H	6.3	0.4	Class A Amplifier	125	Cath. Bias	125	3.2	11	200000	14000	Cath. Bias Res., 56 ohms		
6F5	High-Mu Triodes	C1	5M	H	6.3	0.3	Class A Amplifier	100	-1.0	—	—	0.4	85000	1150	100	—	—
								250	-2.0	—	—	0.9	66000	1500	100	—	—
6F5-GT		C2g	88L1					300 μ	Cath. Bias, 8800 ohms.		Grid Resistor, **0.5 megohm.		Gain per stage = 43 Gain per stage = 63				
6F6	Power Pentodes	C2a	7B				Pentode Class A Amplifier	250	-16.5	250	6.5	34.0	80000	2500	—	7000	3.2
6F6-G		D11c	75J	H	6.3	0.7	Triode Class A Amplifier	285	-20.0	285	7.0	38.0	78000	2550	—	7000	4.8
6F6-GT		C10	75J				Class A Amplifier	250	-20.0	—	—	31.0	2600	2600	6.8	4000	0.85
							Pentode Push-Pull Class A Amplifier	315	Cath. Bias	285	12.0 ϕ	62.0 ϕ	Cath. Bias Resistor, 320 ohms ϕ		10000	10.5 ϕ	
6F7	Medium-Mu Triode—Remote-Cutoff Pentode	D0	7E	H	6.3	0.3	Triode Unit as Class A Amplifier	100	-3.0 min.	—	—	3.5	16000	500	8	—	—
							Pentode Unit as Class A Amplifier	100	-3.0 min.	100	1.6	6.3	290000	1050	—	—	—
							Pentode Unit as Mixer	250	-10.0	100	1.5	6.3	850000	1100	Oscillator Peak Volts = 7.6. Conversion Transcond. = 300 micromhos.		
6F8-G	Twin-Triode Amplifier	D8	80	H	6.3	0.6	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6J5.									
6FG6	Electron-Ray Tube	B9b	90A	H	6.3	0.27	Visual Indicator	For other characteristics, refer to Type EM84/6FG6.									
6FV6	Sharp-Cutoff Tetrode	B0	7F0	H	6.3	0.2	Class A Amplifier	125	-1	—	1.5	10	100000	8000	—	—	—
6FW8	Medium-Mu Twin Triode	B0a	90J	H	6.3	0.4	Each Unit as Class A Amplifier	125	-2	—	—	15	2600	12500	33	—	—

6G6-G	Power Amplifier Pentode	D3	7B ₁	H	6.3	0.13	Pentode Class A Amplifier	135 180	- 6.0 - 9.0	135 180	2.0 2.5	11.5 15.0	170000 175000	2100 2300	—	12000 10000	0.6 1.1
6H6 6H6-GT	Twin Diodes	A1b C3	7Q 7Q11	H	6.3	0.3	Voltage Doubler Half-Wave Rectifier	Max. AC Supply Volts per Plate (RMS), 150 Min. Total Effect. Plate-Supply Imped. per Plate: half-wave, 30 ohms; full-wave, 15 ohms. Max. DC Output Max., 8 min. Max. AC Plate Volts (RMS), 150 Min. Total Effective Plate-Supply Impedance: up to 117 volts, 15 ohms; at 150 volts, 40 ohms.									
6J5 6J5-GT	Medium-Mu Triodes	C3 C3	6Q 6Qx	H	6.3	0.3	Class A Amplifier	90 250	0 - 8.0	—	—	10.0 9.0	6700 7700	3000 2600	20 20	—	—
6J6	Medium-Mu Twin Triode	D8	7BP	H	6.3	0.45	Each Unit as Class A Amplifier Push-Pull Class C Amplifier	100 150	Cathode Resistor, for both units, 50 ohms			8.5	7100	5300	38	—	—
6J7 6J7-G 6J7-GT	Sharp-Cutoff Pentodes	C1 D8 C3	7R 7R11 7R _μ	H	6.3	0.3	Pentode Class A HF Amplifier Pentode Class A AF Amplifier Pentode Bias Detector	100 250 250	- 3.0 - 3.0 - 4.3	100 100 100	0.5 0.5	2.0 2.0	1.0 _g 1.0 + $\frac{1}{2}$	1185 1225	—	—	—
								Cath. Bias, 2600 ohms. Screen Resistor = 1.2 meg. Grid Resistor, ** Gain per stage = 85 Cath. Bias, 1200 ohms. Screen Resistor = 1.2 meg. 0.5 megohm. Gain per stage = 140									
6J8-G	Triode-Heptode Converter	D8	8H	H	6.3	0.3	Triode Unit as Oscillator Heptode Unit as Mixer	100 250	Triode Grid Resistor, 50000 ohms			4.0 5.8	Triode-Grid & Heptode-Grid Current, 0.3 ma Triode-Grid & Heptode-Grid Current, 0.4 ma				
6K5-GT	High-Mu Triode	C3	9U	H	6.3	0.3	Class A Amplifier	250	- 3.0	—	—	1.1	50000	1400	70	—	—
6K6-GT	Power Pentode	C3c	7B ₁	H	6.3	0.4	Single-Tube Class A Amplifier Push-Pull Class A Amplifier	250 315 285	- 18.0 - 21.0 - 25.5	250 250	5.5 4.0	32.0 25.5	90000 110000	2300 2100	—	7600 9000	3.40 4.50
6K7 6K7-G 6K7-GT	Remote-Cutoff Pentodes	C1 D8 C3	7R 7R ₁ 7R _μ	H	6.3	0.3	Class A Amplifier Mixer Service	250 250	- 3.0 - 10.0	125 180	2.6	10.5	60000	1650	—	—	—
								Cath. Bias Resistor, 400 ohms Oscillator Peak Volts = 7.0									
6K8 6K8-G 6K8-GT	Triode-Hexode Converters	C1 D8 D18	8K 8K ₁ 8K _μ	H	6.3	0.3	Triode Unit as Oscillator Hexode Unit as Mixer	100 100 250	Grid Res., 50000 ohms			3.8	Triode-Grid & Hexode-Grid Current, 0.15 ma				
								400000 Conversion Transcond., 325 micromhos. 600000 Conversion Transcond., 350 micromhos.									
6L5-G	Medium-Mu Triode	D3	6Q ₁	H	6.3	0.15	Class A Amplifier	135 250	- 5.0 - 9.0	—	—	3.5 6.0	11300 9000	1500 1900	17 17	—	—
6L6 6L6-G 6L6-GB	Beam Power Tubes	D7 C3 D8	7AC 7AC ₁ 7AC	H	6.3	0.9	Single-tube Class A Amplifier Push-Pull Class A Amplifier Push-Pull Class AB ₁ Amplifier	250 250 270 270 360 360	- 14.0 — - 17.5 — - 22.5	250 270 270 270	5.0 5.4 11.0 11.0 5.0	72.0 75.0 134.0 134.0 88.0 88.0	Cath. Bias Resistor, 168 ohms. Cath. Bias Resistor, 124 ohms Cath. Bias Resistor, 248 ohms				
								2500 2500 5000 5000 6600 9000									
								6.5 6.5 17.5 $\frac{1}{2}$ 18.5 $\frac{1}{2}$ 26.5 $\frac{1}{2}$ 24.5 $\frac{1}{2}$									

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Vols	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Diagn.	S. C.	C. T.	Volts	Amp.											
6L7 6L7-G	Pentagrid Mixer-A	C1	7T	H	6.3	0.3	Mixer Service	250	- 3.0	100	7.1	2.4	Oscillator-Grid (No. 3) Bias, -10 volts. Grid-No. 3 Peak Swing, 17 volts minimum Conversion Transcond., 375 micromhos				
		D1	7T1										Class A Amplifier	250	- 3.04	100	6.5
6N6-G	Direct-Coupled Power Triode	D11c	7AU	H	6.3	0.8	Class A Amplifier	Output Triode: Plate Volts, 300; Plate Max., 45; Load, 7000 ohms Triode: Plate Volts, 300; Grid Volts, 0; A-F Signal Volts (Peak), 21; Plate Ma., 8.					Input	4.0			
6N7 6N7-GT	High-Mu Twin Power Triodes	C2a	8B	H	6.3	0.8	Class A Amplifier (as Driver)	250	- 5.0	—	—	6.0	11300	3100	35	20000	exceeds
		C2b	8B1					294	- 6.0	—	—	7.0	11000	3200	35	or more	0.4
6PS-GT	Medium-Mu Triode	C8c	6Q1	H	6.3	0.3	Amplifier Detector	For other characteristics, refer to Type 76.									
6P7-G	Triode-Pentode	D8	7U	H	6.3	0.3	Amplifier and Converter	For other characteristics, refer to Type 6F7.									
6Q7 6Q7-G 6Q7-GT	Twin-Diode High-Mu Triodes	C1	7V	H	6.3	0.3	Triode Unit as Class A Amplifier	100	- 1.0	—	—	0.8	58000	1200	70	—	—
		C2	7V1					250	- 3.0	—	—	1.1	58000	1200	70	—	—
		C3	7V2					300M	Cath. Bias, 3000 ohms.	Grid Resistor, ** 0.5 megohms		Gain per stage = 45					
6R7 6R7-G 6R7-GT	Twin-Diode Medium-Mu Triodes	C1	7V	H	6.3	0.3	Triode Unit as Class A Amplifier	250	- 9.0	—	—	9.5	8500	1000	16	—	—
		C2	7V1					300M	Cath. Bias, 5000 ohms.	Grid Resistor, ** 0.22 megohms		Gain per stage = 12					
		C3	7V1					300M	Cath. Bias, 5000 ohms.	Grid Resistor, ** 0.22 megohms		Gain per stage = 12					
6S4 6S4-A	Medium-Mu Triode	B9c	8AC	H	6.3	0.6	Vertical Deflection Amplifier	Max. DC Plate Volts, 500 Max. DC Cathode Ma., 30					Max. Peak Positive-Pulse Plate Volts, 2000 Max. Plate Dissipation, 7.5 watts				
		D9	7B1	H	6.3	0.15	Class A Amplifier	135	- 3.0	67.5	0.9	3.7	1.0	1250	—	—	—
6S7 6S7-G	Remote-Cutoff Pentodes	D8	7B1	H	6.3	0.15	Class A Amplifier	250	- 3.0	100	2.0	8.5	1.0	1750	—	—	—
6S8-GT	Triode-Diode High-Mu Triode	C9c	80B	H	6.3	0.3	Triode Unit as Class A Amplifier	100	- 1.0	—	—	0.4	110000	900	100	—	—
6SA7 6SA7-GT	Pentagrid Converter-A	B3	8B	H	6.3	0.3	Mixer	100	Self-Excited	100	8.5	3.3	500000	Grid No. 1 Resistor, 20000 ohms. Conversion Transcond., 450 micromhos.			
		C3	8AD					250	- 2.0	—	—	0.9	91000	1100	100	—	—
6SB7-Y	Pentagrid Converter-A	B3	8B	H	6.3	0.3	Mixer	100	- 1.0	100	10.2	3.6	500000	Grid No. 1 Resistor, 20000 ohms. Conversion Transcond., 950 micromhos			
250	- 1.0	100	10.0	3.8	1.0	—	—	—	—	—	—	—	—	—	—	—	
6SC7	High-Mu Twin-Triode Amplifier	B3	8B	H	6.3	0.3	Each Unit as Amplifier	250	- 2.0	—	—	2.0	53000	1325	70	—	—
6SF5 6SF5-GT	High-Mu Triodes	B3	8AB	H	6.3	0.3	Class A Amplifier	100	- 1.0	—	—	0.4	85000	1150	100	—	—
		C3	8AB1					250	- 2.0	—	—	0.9	66000	1500	100	—	—
		300M	Cath. Bias, 3200 ohms.					Grid Resistor, ** 0.5 megohms		Gain per stage = 63							

6SF7	Diode-Remote-Cutoff Pentode	8B	7AZ	H	6.3	0.3	Pentode Unit as Class A Amplifier	100	- 1.0	100	4.3	13.5	200000	1975				
								250	- 1.0	100	4.1	13.0	700000	2050				
6SG7	Remote-Cutoff Pentode	8B	8BK	H	6.3	0.3	Class A Amplifier	100	- 1.0	100	3.2	6.2	250000	4100				
								250	- 2.5	150	3.4	9.2	1.0 + j	4000				
6SH7	Sharp-Cutoff Pentode	8B	8BK	H	6.3	0.3	Class A Amplifier	100	- 1.0	100	2.1	5.3	350000	4000				
								250	- 1.0	150	4.1	10.8	900000	4900				
6SJ7	Sharp-Cutoff Pentodes	8J	8B	H	6.3	0.3	Class A Amplifier	100	- 3.0	100	0.9	2.9	700000	1575				
								250	- 3.0	100	0.8	3.0	1.0 + j	1650				
6SJ7-GT		C3	8B	H	6.3	0.3		300 μ	Cath. Bias, 860 ohms.		Grid Resistor, ** 0.5 megohm						Gain per stage = 167	
6SK7	Remote-Cutoff Pentodes	8J	8B	H	6.3	0.3	Class A Amplifier	100	- 1.0	100	4.0	13.0	120000	2350				
								250	- 3.0	100	2.6	9.2	800000	2000				
6SL7-GT	High-Mu Twin Triode	C2c	8D	H	6.3	0.3	Each Unit as Class A Amplifier	250	- 3.0			2.3	44000	1600	70			
6SN7-GT	Medium-Mu Twin Triode	C2c	8D	H	6.3	0.6	Each Unit as Class A Amplifier	90	0			10.0	6700	3000	20			
								250	- 8.0			9.0	7700	1600	20			
6SN7-GTA																		
6SN7-GTB							Vertical Deflection Amplifier +											
								Max DC Plate Volts, 450					Max. Plate Dissipation: 5 watts either plate, 7.5 watts both plates					
								Max. Peak Cathode Ma., 70					Max. Peak Positive Pulse Plate Volts, 1500					
6SQ7	Twin-Diode High-Mu Triodes	8J	8Q	H	6.3	0.3	Triode Unit as Class A Amplifier	100	- 1.0			0.3	110000	925	100			
								250	- 2.0			1.1	85000	1175	100			
6SQ7-GT		C8	8Q	H	6.3	0.3		300 μ	Cath. Bias, 3900 ohms.		Grid Resistor, ** 0.5 megohm.						Gain per stage = 53	
6SR7	Duplex-Diode Triode	8B	8Q	H	6.3	0.3	Triode Unit as Class A Amplifier	250	- 9.6			9.5	8500	1900	18	10000	0.3	
6SS7	Remote-Cutoff Pentode	8B	8B	H	6.3	0.15	Class A Amplifier	100	- 1.6	100	3.1	12.2	120000	1930				
								250	- 3.6	100	2.8	9.0	1.0 j	1850				
6ST7	Duplex-Diode Triode	8B	8Q	H	6.3	0.15												
6SZ7	Twin-Diode High-Mu Triode	8B	8Q	H	6.3	0.15	Triode Unit as Class A Amplifier	100	- 1.0			0.8	61000	1150	70			
								250	- 3.0			1.0	58000	1200	70			
6T4	Medium-Mu Triode	A1	7DK	H	6.3	0.225	Oscillator in UHF TV Receivers											
6T7-G	Twin-Diode High-Mu Triode	D8	7V	H	6.3	0.15	Triode Unit as Class A Amplifier	80				18		7000	13			
								250	- 3.0			1	87000	1050	65			
6T8								300 μ	Cath. Bias, 4580 ohms.		Grid Resistor, ** 0.5 megohm						Gain per stage = 60	
6T8-A	Triple-Diode High-Mu Triode	D6a	8C	H	6.3	0.45	Triode Unit as Class A Amplifier	100	- 1			0.8	54000	1300	70			
								250	- 3			1.0	58000	1200	70			
6U6	Electron-Ray Tube	D6	8B	H	6.3	0.3	Visual Indicator											
6U7-G	Remote-Cutoff Pentode	D13	7R1	H	6.3	0.3	Class A Amplifier Mixer Service											
																		Oscillator Peak Volts = 7.0

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mhos	Amplification Factor	Load or Stated Power Output Ohms	Power Output Watts
		Beam	S.C.	E.T.	Volts	Ampl.											
		Values to right give operating conditions and characteristics for indicated typical use															
6U8 6U8-A	Medium-Mu Triode—Sharp-Cutoff Pentodes	80a	9AE	H	6.3	0.45	Triode Unit as Class A Amplifier	150	Cath. Bias	—	—	18	5000	8500	40	Cath. Res., 56 ohms	
								250	Cath. Bias	110	3.5	10	400000	5200	—	Cath. Res., 68 ohms	
6V3-A	Half-Wave Rectifier	08a	9BD	H	6.3	1.75	Television Dumper Service	Max. Peak Inverse Plate Volts, 6000 (Abs.)			Max. Peak Heater-Cathode Volts, +300						
6V6 6V6-GT	Beam Power Tubes	C2a	7AC	H	6.3	0.45	Single-Tube Class A Amplifier	250	-12.5	250	4.5	45.0	50000	4100	—	5000	4.5
								315	-13.0	225	2.2	34.0	80000	3750	—	8500	5.5
6V6-GT	Beam Power Tubes	C2c	7AC1	H	6.3	0.45	Push-Pull Class AB ₁ Amplifier	250	-15.0	250	5.0	70.0	60000	3750	—	10000	10.0
								285	-19.0	285	4.0	70.0	70000	3600	—	8000	14.0
6V7-G	Duplex-Diode Triode	D8	7V1	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 85.									
6W4-GT	Half-Wave Rectifier	C2a	40G	H	6.3	1.2	With Capacitive-Input Filter	Max. AC Plate Volts (RMS), 350			Max. DC Output Ma., 125			Min. Total Effect. Supply Imped. per Plate, 145 ohms.			
6W6-GT	Beam Power Amplifier	C2c	7AC1	H	6.3	1.2	Vertical Deflection Amplifier	Max. DC Plate Volts, 300			Max. Peak Positive-Pulse Plate Volts, 1200						
6W7-G	Sharp-Cutoff Pentode	D8	7W1	H	6.3	0.15	Class A Amplifier	250	-3.0	100	0.5	2.0	1.5	1225	—	—	
6X4	Full-Wave Rectifier	81	9BB	H	6.3	0.6	With Capacitive-Input Filter	Max. AC Volts per Plate (RMS), 325			Max. DC Output Ma., 70			Total Effect. Supply Imped. per Plate, 520 ohms			
								Max. Peak Inverse Volts, 1250			Max. Peak Plate Ma., 210			Min. Value of Input Choke, 10 henries			
6X5 6X5-GT	Full-Wave Rectifiers	C2a	9B	H	6.3	0.6	With Inductive-Input Filter	Max. AC Volts per Plate (RMS), 450			Max. DC Output Ma., 70			Min. Value of Input Choke, 10 henries			
								Max. Peak Inverse Volts, 1250			Max. Peak Plate Ma., 210			Min. Total Effect. Supply Imped. per Plate, 520 ohms			
6X5 6X5-GT	Full-Wave Rectifiers	C2a	9B1	H	6.3	0.6	With Capacitive-Input Filter	Max. AC Volts per Plate (RMS), 325			Max. DC Output Ma., 70			Min. Total Effect. Supply Imped. per Plate, 520 ohms			
								Max. Peak Inverse Volts, 1250			Max. Peak Plate Ma., 210			Min. Value of Input Choke, 10 henries			
6X8	Triode-Pentode Converter	88a	9AK	H	6.3	0.45	Triode Unit as 250-Mc. Oscillator	150	Grid Resistor, 2700 ohms	Plate Current, 13 ma.			Power Output (Approx.), 0.5 watt				
								150	Grid-No. 2 Volts, 150	Max. Volts at Mixer Grid No. 1 (RMS), 2.6			Mixer Grid-No. 1 Resistor, 120000 ohms			Conversion Transconductance, 2100 μ mhos	
6Y5	Full-Wave Rectifier	D5	6J	H	6.3	0.8	With Capacitive-Input Filter	Max. AC Volts per Plate (RMS), 350									
6Y5	Full-Wave Rectifier	D5	6J	H	6.3	0.8	With Capacitive-Input Filter	Max. DC Output Ma., 50									
6Y6-G 6Y6-GA	Beam Power Tube	D11c C11a	7AC1	H	6.3	1.25	Single-Tube Class A Amplifier	135	-13.5	135	3.5	58.0	9300	7000	—	3000	3.6
								200	-14.0	135	2.2	61.0	18300	7100	—	2600	6.0

6Y7-G	Twin-Triode Amplifier	D3	001	H	6.3	0.6	Class B Amplifier	For other characteristics, refer to Type 79.											
6Z5	Full-Wave Rectifier	D6	0K	H	6.3	0.8	With Capacitive-Input Filter	Max. AC Volts per Plate (RMS), 230 Max. DC Output Ma., 60											
6Z7-G	Twin-Triode Amplifier	D3	001	H	6.3	0.3	Class B Amplifier	135 100	0 0	—	—	Power Output in <i>for one tube at stated plate-to-plate load.</i>				9000 12000	2.5 4.2		
6ZY5-G	Full-Wave Rectifier	D3	001	H	6.3	0.3	With Capacitive-Input Filter	Max. AC Volts per Plate (RMS), 325			Max. DC Output Ma., 40			Min. Total Effect. Supply Imped. per Plate, 225 ohms					
7A4	Medium-Mu Triode	B5	0AC	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6J5.											
7A5	Beam Power Tube	C2	0AA	H	6.3	0.75	Class A Amplifier	110 123	- 7.5 - 9.0	110 125	3.0 3.3	40.0 44.0	16000 17000	5000 6000	—	2500 2700	1.5 2.3		
7A6	Twin Diode	B6	7AJ	H	6.3	0.15	Detector Rectifier	Max. AC Voltage per Plate, 150 Volts, RMS						Max. DC Output Current per plate, 6 Ma.					
7A7	Remote-Cutoff Pentode	B6	0V	H	6.3	0.3	Class A Amplifier	For other characteristics, refer to Type 6BK7.											
7A8	Oscillator Converter	B6	0U	H	6.3	0.15	Converter	100 250	- 3.0 - 3.0	75 100	2.7 3.2	1.8 3.0	650000 700000	Anode-Grid (#2): 250 μ max. volts, 4.2 ma. Oscillator-Grid (#1) Resistor ϕ Conversion Transcond., 550 micromhos.					
7AD7	Power Pentode	C2	0V	H	6.3	0.6	Class A Amplifier	300	Cath. Bias	150	7.0	28.0	300000	9500	Cath. Res., 60 ohms				
7AF7	Medium-Mu Twin Triode	B6	0AC	H	6.3	0.3	Each Unit as Class A Amplifier	250 100	-10	—	—	9.0 10.8	7600 6500	2100 2600	16 17	—	—		
7AG7	Sharp-Cutoff Pentode	B6	0V	H	6.3	0.13	Class A Amplifier	250	Cath. Bias	250	2.0	6.0	1 meg.	4200	Cathode-Bias Resistor, 250 ohms				
7AH7	Remote-Cutoff Pentode	B6	0V	H	6.3	0.15	Class A Amplifier	250	Cath. Bias	250	1.9	6.8	1 meg.	3300	Cath. Res., 250 ohms				
7AU7	Medium-Mu Twin-Triode	B6	0A	H	6.3	0.6	Each Unit as Class A Amplifier	100 250	0 - 8.5	—	—	11.8 10.5	6500 7700	3100 2200	20 17	—	—		
7B4	High-Mu Triode	B6	0AC	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6BP5.											
7B5	Power Amplifier Pentode	C2	0AE	H	6.3	0.4	Class A Amplifier	For other characteristics, refer to Type 6K6-OT.											
7B6	Twin-Diode High-Mu Triode	B6	0W	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 6BQ7.											
7B7	Remote-Cutoff Pentode	B6	0V	H	6.3	0.15	Class A Amplifier	250	- 3.0	100	1.7	8.5	750000	1750	—	—	—		
7B8	Pentagrid Converter	B6	0X	H	6.3	0.3	Converter	For other characteristics, refer to Type 6AS.											
7C5	Beam Power Tube	C2	0AA	H	6.3	0.45	Class A Amplifier	For other characteristics, refer to Type 6V6-OT.											
7C6	Twin-Diode High-Mu Triode	B6	0W	H	6.3	0.15	Triode Unit as Class A Amplifier	250	- 1.0	—	—	1.3	100000	1000	100	—	—		
7C7	Sharp-Cutoff Pentode	B6	0V	H	6.3	0.15	Class A Amplifier	100 250	- 3.0 - 3.0	100 100	0.4 0.5	1.8 2.0	1.2 2.0	1225 1500	—	—	—		

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current mA	Plate Current mA	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ hos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Dim.	S. C.	C. T.	Volts	Am.											
7E6	Twin-Diode Triode	06	9W	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 6R7.									
7E7	Twin-Diode Remote-Cutoff Pentode	06	9AE	H	6.3	0.3	Pentode Unit as Class A Amplifier	100 250	Cath. Bias	100 100	2.7 1.6	10.0 7.5	150000 700000	1000 1300	Cath. Res., 800 ohms Cath. Res., 330 ohms		
7F7	High-Mu Twin-Triode	06	9AC	H	6.3	0.3	Each Unit as Amplifier	For other characteristics, refer to Type 6SL7-GT.									
7F8	Medium-Mu Twin-Triode	06	9BW	H	6.3	0.3	Each Unit as Class A Amplifier	250	Cathode-Bias Res., 500 ohms		6.0		3300	48			
7G7	Sharp-Cutoff Pentode	06	9V	H	6.3	0.45	Class A Amplifier	250	- 2.0	100	2.0	6.0	800000	4500			
7H7	Sharp-Cutoff Pentode	06	9V	H	6.3	0.3	Class A Amplifier	100 250	- 1.8 Cath. Bias	100 150	2.6 3.2	7.5 10.0	350000 800000	4000 4000	Cath. Bias Res., 180 ohms		
7J7	Triode-Heptode Converter	06	9BL	H	6.3	0.3	Triode Unit as Oscillator	100 250	Triode-Grid Resistor, 50000 ohms		3.3 5.0		Triode-Grid & Heptode-Grid Current, 0.3 ma. Triode-Grid & Heptode-Grid Current, 0.4 ma.				
							Heptode Unit as Mixer	100 250	- 3.0 - 3.0	100 100	2.8 2.8	1.5 1.4	500000 1.55	Conversion Transcond., 200 μ hos. Conversion Transcond., 290 μ hos.			
7K7	Twin-Diode-High-Mu Triode	06	9BF	H	6.3	0.3	Triode Unit as Class A Amplifier	250	- 2			2.3	44000	1600	70		
7L7	RF Amplifier Pentode	06	9V	H	6.3	0.3	Class A Amplifier	100 250	- 1.0 - 1.5	100 100	2.4 1.5	5.5 4.5	100000 3100	3000			
7N7	Medium-Mu Twin-Triode	02	9AC	H	6.3	0.6	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SN7-GT.									
7Q7	Pentagrid Converter	06	9AL	H	6.3	0.3	Converter	100 250	- 2.0 - 2.0	100 100	8.5 8.5	3.3 3.5	500000 1.05	Grid \pm Resistor, 20000 ohms. Conversion Transcond., 550 μ hos.			
7R7	Twin-Diode-Remote-Cutoff Pentode	06	9AE	H	6.3	0.3	Pentode Unit as Class A Amplifier	100 250	- 1.0 - 1.0	100 100	2.2 2.1	3.5 3.7	350000 1.05	3000 3300			
7S7	Triode-Heptode Converter	06	9BL	H	6.3	0.3	Triode Unit as Oscillator	100 250	Triode-Grid Resistor, 50000 ohms		3.0 3.0		Triode-Grid & Heptode-Grid Current, 0.3 ma. Triode-Grid & Heptode-Grid Current, 0.4 ma.				
							Heptode Unit as Mixer	100 250	- 2.0 - 2.0	100 100	3.0 3.0	1.9 1.8	500000 1.25	Conversion Transcond., 500 μ hos. Conversion Transcond., 535 μ hos.			
7V7	RF Amplifier Pentode	06	9V	H	6.3	0.45	Class A Amplifier	300			150	3.9	10.0	300000	5000	Cath. Bias Res., 160 ohms	
7W7	RF Amplifier Pentode	06	9BJ	H	6.3	0.45	Class A Amplifier	For other characteristics, refer to Type 7V7.									



Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating		Use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Realization (ohm-dia)	Trans-conductance (ohm-dia)	Amplification Factor	Load Impedance Ohms	Power Output Watts
		Beam	K.C.	K.T.	Watt. Amp.											
9A97	Medium-Mu Triode-Twin Diode	6Ba	9A	H6	4.7	Class A Amplifier	100	0	—	—	11.8	6500	3100	20	—	—
		6Ba	9A	H4	9.4	Triode-Link as Class A Amplifier	250	-8.5	—	—	10.5	7700	2200	17	—	—
9BR7	High-Mu Triode-Vacuum-Mu Triode	6Ba	9B7	H6	4.7	Triode-Link as Class A Amplifier	100	—	—	—	3.7	15000	4000	60	—	—
		6Ba	9B7	H4	9.4	Triode-Link as Class A Amplifier	250	Cath. Bias Res., 200 ohms	—	—	10	10900	4000	60	—	—
9CL8	Sharp-cut-off Triode-Tetrode	6Ba	9C8	H6	9.5	Triode-Link as Class A Amplifier	125	Cath. Bias Res., 56 ohms	—	—	15	5000	8000	40	—	—
		6Ba	9C8	H4	9.5	Triode-Link as Class A Amplifier	125	-1	125	4	12	100000	5800	—	—	—
9UB-A	Medium-Mu Triode-Sharp-cut-off Pentode-Link	6Ba	9UB	H6	9.45	Triode-Link as Class A Amplifier	100	Cath. Bias Res., 56 ohms	—	—	18	5000	8500	40	—	—
		6Ba	9UB	H4	9.45	Pentode-Link	250	Cath. —	110	3.5	10	400000	5200	—	—	—
10B	Power Amplifier Triode	6Ba	10B	F	7.5	Class A Amplifier	350	-32.0	—	—	16.0	5150	1550	8.0	11000	0.9
		6Ba	10B	F	7.5	Class A Amplifier	425	-40.0	—	—	18.0	5000	1600	8.0	10200	1.6
10C8	High-Mu Triode-Sharp-cut-off Pentode	6Ba	10CA	H6	10.5	Class A Amplifier	250	Cath. Bias Res., 390 ohms	—	—	7.3	12000	12000	—	—	—
		6Ba	10CA	H4	10.5	Triode-Link as Class A Amplifier	135	Cath. —	125	3.2	11.5	190000	8000	—	—	—
10DE7	Dual Triode With Dissimilar Filaments	6Ba	10DE7	H6	9.7	Vertical Deflection Amplifier	—	—	—	—	—	—	—	—	—	—
		6Ba	10DE7	H4	9.7	Vertical Deflection Amplifier	—	—	—	—	—	—	—	—	—	—
11CY7	Dual Triode With Dissimilar Filaments	6Ba	11CY7	H6	11	Vertical Deflection Amplifier	—	—	—	—	—	—	—	—	—	—
		6Ba	11CY7	H4	11	Vertical Deflection Amplifier	—	—	—	—	—	—	—	—	—	—
11	Heaterless Amplifier Triode	6Ba	11	H6	1.1	Class A Amplifier	90	-4.5	—	—	2.5	15500	425	6.6	—	—
		6Ba	11	H4	1.1	Class A Amplifier	135	-10.5	—	—	3.0	15000	440	6.6	—	—
12A5	Power Amplifier Pentode	6Ba	12A5	H6	6.3	Class A Amplifier	100	-15.0	100	3.0	17.0	50000	1700	—	—	—
		6Ba	12A5	H4	6.3	Class A Amplifier	180	-25.0	180	8.0	45.0	35000	2400	—	—	—
12A7	Heaterless Pentode	6Ba	12A7	H6	12.6	Triode-Link as Class A Amplifier	135	-13.5	125	2.5	9.0	102000	975	—	—	—
		6Ba	12A7	H4	12.6	Triode-Link as Class A Amplifier	135	-13.5	125	2.5	9.0	102000	975	—	—	—

Maximum AC Plate Voltage: _____
 Maximum DC Output Current: _____
 115 Volt, RMS
 30 Milliamperes

12A8-GT	Pentag Converter	C3	6A4	H	12.6	0.15	Converter	For other characteristics, refer to Type 6A4.									
12AB5	Beam Power Tube	81a	9EU	H	10.0 to 15.9	0.2 approx. at 12.6 v	Class A Amplifier	250	Cath. Bias	200	1.6	33.5	Cath. Bias Res., 270 ohms		6000	3.3	
							Push-Pull Class AB ₁ Amplifier	250	-15.0	250	5.0	70.0	60000	3750	10000	10.0	
12AC6	Resonate-Cutoff Pentode	80	7BK	H	10.0 to 15.9	0.15 approx. at 12.6 v	Class A Amplifier	12.6	—	12.6	.2	.55	500000	730	Grid-No. 1 Supply Volts, 0 Grid-No. 1 Res., 2.2 megohms		
12AD6	Pentagrid Converter	80	7CH	H	10.0 to 15.9	0.15 approx. at 12.6 v	Converter	12.6	Self-excited	12.6	1.5	0.45	15	Grid-No. 1 Resistor, 33000 ohms Conversion Transcond., 260 micromhos			
12AE6	Twin Diode Medium-Mu Triode	80	7BT	H	10.0 to 15.9	0.15 approx. at 12.6 v	Triode Unit as Class A Amplifier	12.6	0	—	—	0.75	15000	1000	15	—	—
12AE6-A	Twin Diode Medium-Mu Triode	80	7BT	H	10.0 to 15.9	0.15 approx. at 12.6 v	Triode Unit as Class A Amplifier	12.6	0	—	—	1	13000	1300	16.7	—	—
12AF3	Half-Wave Rectifier	C8b	9CB	H	12.6	0.6	Television Dumper Service	Max. Peak Inverse Plate Volts, 4500 Max. Peak Plate Ma., 750				Max. Average Plate Ma., 185 Max. Plate Dissipation, 6 watts					
12AF6	Resonate-Cutoff Pentode	80	7BK	H	10.0 to 15.9	0.15 approx. at 12.6 v	Class A Amplifier	12.6	—	12.6	0.3	0.8	300000	1250	Grid-No. 1 Supply Volts, 0 Grid-No. 1 Res., 2.2 megohms		
12AH7-GT	Twin Triode	C8b	9BE	H	12.6	0.15	Each Unit as Class A Amplifier	100	-3.6	—	—	3.7	10300	1550	16	—	—
								180	-6.5	—	—	7.6	8400	1900	16	—	—
12AJ6	Twin Diode Medium-Mu Triode	80	7BT	H	10.0 to 15.9	0.15 approx. at 12.6 v	Triode Unit as Class A Amplifier	12.6	Grid-No. 1 Supply Volts, 0 Grid-No. 1 Res., 2.2 megohms			0.75	45000	1200	55	—	—
12AL5	Twin-Diode	81	8BT	H	12.6	0.15	Detector-Rectifier	For other characteristics, refer to Type 6AL5.									
12AL8	Medium-Mu Triode—Power Tetrode	81a	9GB	H	10.0 to 15.9	0.15 approx. at 12.6 v	Triode Unit as Class A Amplifier	12.6	Grid Bias Volts, -0.9 (across 2.2 megohm res.)		.5	13000	1000	13	—	—	
							Tetrode Unit as Class A Amplifier	—	Grid-No. 2 (Control Grid) Volts, -0.5 (across 2.2 megohm res.)		Ampl. Factor (Grid-No. 2 to Plate) 7.2				Grid-No. 1 (Space-Charge Grid) Volts, 12.6 Transcond. (Grid-No. 2 to Plate), 15000 μ mhos		
12AQ5	Beam Power Tube	81	7BZ	H	12.6	0.225	Amplifier	For other characteristics, refer to Type 6V6.									
12AT6	Twin-Diode High-Mu Triode	80	7BT	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6AT6.									
12AT7	High-Mu Twin-Triode	80a	8A	H	12.6	0.3	Each Unit as Class A Amplifier	100	Cath. Res., 270 ohms		3.7	15000	4000	60	—	—	
								250	Cath. Res., 200 ohms		10.0	10900	5500	60	—	—	
12AU6	Sharp-Cutoff Pentode	80	7BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6AU6.									
12AU7	Medium-Mu Twin-Triodes	80a	8A	H	6.3	0.3	Each Unit as Class A Amplifier	100	0	—	—	11.8	6500	3100	20	—	—
12AU7-A	Twin-Triodes	80a	8A	H	12.6	0.15	Class A Amplifier	250	-8.5	—	—	10.5	7700	2200	17	—	—

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias in Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ ohms	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Dimen.	S. C.	C. T.	Volts	Ampl.											
12AV5-GA	Beam Power Tube	D1a	6CK	H ⁰	12.6	0.6	Horizontal Deflection Amplifier	Max. DC Plate Volts, 550 Max. DC Cathode Ma., 110		Max. Peak Positive-Pulse Plate Volts, 5500 Max. Plate Dissipation, 11 watts							
12AV6	Twin-Diode High-Mu Triode	B0	7BT	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6AV6.									
12AV7	Medium-Mu Twin-Triode	B0a	9A	H	6.3 12.6	0.45 0.225	Each Unit as Class A Amplifier	150	Cath. Bias Res., 56 ohms		18	48000	8500	41	Cutoff Volts, -12		
12AW6	Sharp-Cutoff Pentode	B0	7CM	H	12.6	0.15	For other characteristics, refer to Type 6AG5.										
12AX4-GT 12AX4-GTA	Half-Wave Rectifiers	C2c	1CG	H H ⁰	12.6	0.6	Television Dumper Service	Max. Peak Inverse Plate Volts, 4400 Max. Peak Plate Ma., 750 Max. DC Plate Ma., 125		Max. Peak Heater-Cathode Volts: -4400** -4300 **DC component must not exceed 900 volts							
12AX7	High-Mu Twin-Triode	B0a	9A	H	6.3 12.6	0.3 0.15	Each Unit as Class A Amplifier	100 250	-1.0 -2.0	—	—	0.5 1.2	80000 62500	1250 1600	180 100	—	—
12AY7	Medium-Mu Twin-Triode	B0a	9A	H	6.3 12.6	0.3 0.15	Each Unit as Class A Amplifier	250	-4	—	—	3	25000	1750	44	—	—
12AZ7	High-Mu Twin-Triode	B0a	9A	H	6.3 12.6	0.45 0.225	Each Unit as Class A Amplifier	100 250	Cath. Bias Res., 270 ohms Cath. Bias Res., 200 ohms		3.7 10.0	15000 10900	4000 5500	60 60	—	—	
12B4-A	Low-Mu Triode	B1a	9AC	H ⁰	6.3 12.6	0.6 0.3	Vertical Deflection Amplifier	Max. DC Plate Volts, 550 Max. Peak Positive-Pulse Plate Volts, 1000 (Abs.) Max. Peak Dissipation, 5.5 Watts		Max. Peak Neg. Pulse Grid Volts, 250 Max. Peak Cathode Ma., 105 Max. Average Cathode Ma., 30							
12B8-GT	Triode-Pentode	C10a	8T	H	12.6	0.3	Triode Unit as Class A Amplifier Pentode Unit as Class A Amplifier	90 90	0 -3.0	— 90	— 2.0	2.8 7.0	37000 20000	2400 1800	90	—	—
12BA6	Remote-Cutoff Pentode	B0	7BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6BA6.									
12BA7	Pentagrid Converter	B1a	9CT	H	12.6	0.15	Converter	For other characteristics, refer to Type 6BA7.									
12BD6	Remote-Cutoff Pentode	B0	7BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6BD6.									
12BE6	Pentagrid Converter	B0	7CH	H	12.6	0.15	Converter	For other characteristics, refer to Type 6BE6.									
12BF6	Twin-Diode Medium-Mu Triode	B0	7BT	H	12.6	0.15	Triode Unit as Class A Amplifier	250	-9.0	—	—	9.5	8500	1900	16	Power Output, 300 milliwatts	
12BH7 12BH7-A	Medium-Mu Twin-Triodes	B1a	9A	H H ⁰	6.3 12.6	0.6 0.3	Vertical Deflection Amplifier	Max. DC Plate Volts, 450 Max. DC Plate Ma., 20		Absolute Max. Peak Positive-Pulse Plate Volts, 1500 Max. Plate Dissipation (Each Unit), 3.5 watts							

12BK5	Beam Power Tube	81a	80Q	HO	12.6	0.6	Class A Amplifier	250	- 5	250	3.5	35	100000	8500	—	6500	3.5
12BL6	Remote-Cutoff Pentode \odot	80	7BK	H	10.0 to 15.9	0.15 approx. at 12.6 v	Class A Amplifier	12.6	Grid-No. 1 Supply Volts, 0	12.6	0.5	1.35	500000	1350	Grid-No. 1 and Grid-No. 3 Volts for transcond. of 10 micromhos, -5		
12BQ4- GTB/ 12CU6	Beam Power Tube	C11	6AM	HO	12.6	0.6	Horizontal Deflection Amplifier	Max. LC Plate Volts, 600 Max. DC Cathode Ma., 117.5		Max. Peak Positive-Pulse Plate Volts, 6000 (Abs.) Max. Plate Dissipation, 11 Watts							
12BR7	Twin-Diode High-Mu Triode	80a	9CF	H	6.3 12.6	0.45 0.225	Triode Unit as Class A Amplifier	100 250	Cath. Bias Res., 270 ohms Cath. Bias Res., 200 ohms		3.7 10	15000 10000	4000 5500	60 60	—	—	—
12BV7	Sharp-Cutoff Pentode	81a	90F	H	6.3 12.6	0.6 0.3	Class A Amplifier	250 250	Cath. Bias - 8	150 180	6 —	27 0.5x	85000 13000	13000	Cath. Bias Res., 60 ohms Minimum Plate Current		
12BY7 12BY7-A	Sharp-Cutoff Pentodes	81a	90F	HO	6.3 12.6	0.6 0.3	Class A Amplifier	250	Cath. Bias	180	5.75	26	90000	11000	Cath. Res., 100 ohms		
12BZ7	High-Mu Twin Triode	81a	9A	H	6.3 12.6	0.6 0.3	Each Unit as Class A Amplifier	250	- 2	—	—	2.5	31800	3200	100	—	—
12C8	Twin-Diode Remote-Cutoff Pentode	C1	8E	H	12.6	0.15	Pentode Unit as RF Amplifier Pentode Unit as AF Amplifier	250	- 3.0	125	2.3	10.0	600000	1275	—	—	—
12CA5	Beam Power Tube	81	7CV	HO	12.6	0.6	Class A Amplifier	110 125	- 4 - 4.5	110 125	3.5 4.0	32 37	16000 15000	8100 9200	— —	3500 4500	1.1 1.5
12CM5	Remote-Cutoff Pentode \odot	81	7CV	H	10.0 to 15.9	0.45 approx. at 12.6 v	Class A Amplifier	12.6	—	12.6	3.5	4.5	40000	3000	Grid-No. 1 Supply Volts, 0 Grid-No. 1 Res., 2.2 megohms		
12CR6	Diode Remote-Cutoff Pentode	80	7EA	H	12.6	0.15	Pentode Unit as Class A Amplifier	250	- 2	100	2.6	9.6	800000	2200	Grid-No. 1 Volts for transcond. of 10 micromhos, -32		
12CT8	Medium-Mu Triode—Sharp-Cutoff Pentode	80a	9DA	HO	12.6	0.3	Triode Unit as Class A Amplifier Pentode Unit as Class A Amplifier	150 200	Cath. Bias Res., 150 ohms Cath. Bias	— 125	0 3.4	0 15	8700 150000	4900 7000	40	—	—
12CU5	Beam Power Tube	81	7CV	HO	12.6	0.6	Class A Amplifier	120	- 0	110	4	49	10000	7500	—	2500	2.3
12CU5/ 12C5	Beam Power Tube	81	7CV	HO	12.6	0.6	Class A Amplifier	120	- 8	110	4	49	10000	7500	—	2500	2.3
12CX6	Sharp-Cutoff Pentode \odot	80	7BK	H	10.0 to 15.9	0.15 approx. at 12.6 v	Class A Amplifier	12.6	Grid-No. 1 Supply Volts, 0	12.6	1.4	3	40000	3100	Grid-No. 1 Volts for Plate Current of 10 μ a., -4.5		
12D4	Half-Wave Rectifier	C8	4CQ	HO	12.6	0.6	Television Dumper Service	Max. Peak Inverse Plate Volts, 4400 (Abs.) Max. Peak Plate Ma., 900		Max. Average Plate Ma., 135 Max. Plate Dissipation 5.5 watts							

Discontinued types are shown in light face.

12EN5	Power Pentode	91	7CV	9B	12.6	0.6	Class A Amplifier	110	62 ohms Cath. Res.	115	11.5	42	11000	14600	—	8000	—	2000	2.1	2.8	
12EK6	Sharp-Cutoff Pentode	88	79K	88	30.0	0.19	Class A Amplifier	12.6	—	12.6	2	4.4	4000	4200	Grid-No. 1 Res. (Bypassed), 2.2 megohms	—	—	—	—	—	—
12EL6	Twin Diode High-Mu Triode	88	77B	88	10.0	0.15	Class A Amplifier	12.6	—	—	—	.75	6500	1200	55	—	—	—	—	—	
12EM6	Diode Power Pentode	81A	9MV	88	10.0	0.5	Class A Amplifier	12.6	—	—	1	6	4000	5000	Grid-No. 1 Res. 2.2 megohms	—	—	—	—	—	—
12EN6	Beam Power Tube	88	7AC	9B	12.6	0.6	Vertical Deflection Amplifier	12.6	—	—	—	—	—	—	Max. Peak Pos.-Pulse Plate Volts, 1200 Max. Peak Neg.-Pulse Grid Volts, 250 Max. Peak Cathode Mts., 175	—	—	—	—	—	—
12F5-GT	High-Mu Triode	88	9M1	88	12.6	0.15	Amplifier	—	—	—	—	—	—	—	For other characteristics, refer to Type 6SF5.	—	—	—	—	—	—
12F8	Kentron-Classt Triode	88	9F8	88	10.0	0.15	Periodic Limit as Class A Amplifier	12.6	0	12.6	0.38	1	33000	1000	Grid-No. 1 Volts for trans- cond. of 10 micromhos. — 5	—	—	—	—	—	—
12FK6	Low-Mu Triode	88	9F7	88	10.0	0.15	Triode Limit as Class A Amplifier	12.6	Grid Supply Volts, 0 Grid Res. (Bypassed), 2.2 megohms	—	1.3	6200	1300	—	7.4	—	—	—	—	—	—
12FM6	High-Mu Triode	88	9F7	88	10.0	0.15	Triode Limit as Class A Amplifier	12.6	0	—	—	1.8	5600	2400	13.5	—	—	—	—	—	—
12H6	Twin Diode Triode	41B	7Q	88	12.6	0.15	Detector	—	—	—	—	—	—	—	—	—	—	—	—	—	
12J5-GT	Medium-Mu Triode	88	4Q1	88	12.6	0.15	Amplifier	—	—	—	—	—	—	—	For other characteristics, refer to Type 6J5.	—	—	—	—	—	—
12J7-GT	Sharp-Cutoff Triode	88	79J	88	12.6	0.15	Amplifier	—	—	—	—	—	—	—	For other characteristics, refer to Type 6J7.	—	—	—	—	—	—
12J8	Twin Diode Power Triode	88	90C	88	10.0	0.225	Triode Limit as Class A Amplifier	12.6	0	12.6	1.5	13	6000	5500	—	—	—	2700	0.02	—	—
12K5	Power Triode	81	7EK	88	10.0	0.4	Class A Amplifier	—	—	—	—	—	—	—	DC Plate Volts, 12.6 Grid No. 2 (Control Grid) Volts, — .5 Plate Resistance, 480 ohms	—	—	—	—	—	—
12K7-GT	Kenotron-Classt Triode	88	79K	88	10.0	0.15	Amplifier	—	—	—	—	—	—	—	For other characteristics, refer to Type 6K7.	—	—	—	—	—	—
12K8	Triode-Classt Converter	88	8K	88	12.6	0.15	Triode-Classt Converter	—	—	—	—	—	—	—	For other characteristics, refer to Type 6K8.	—	—	—	—	—	—
12L6-GT	Beam Power Tube	98	7AC1	9B	12.6	0.6	Class A Amplifier	110	180 ohms Cath. Res.	110	4.0	46	15000	28000	—	8000	—	4000	—	—	—

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use <small>Values to right give operating conditions and characteristics for indicated typical use</small>	Plate Supply Volts	Grid Bias in Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ ms	Amplification Factor	Load to State Pump Output Ohms	Power Output Watts
		Dim.	S.C.	C.T.	Volts	Amp.											
12Q7-GT	Twin-Diode High-Mu Triode	C3	7V ₂	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6Q7.									
12R5	Beam Power Tube	B1	7CV	H	13.6	0.6	Vertical Deflection Amplifier	Max. DC Plate Volts, 150 Max. Peak Cathode Ma., 155 Max. Plate Dissipation, 4.5 watts		Max. Peak Neg.-Polar Grid-No. 1 Volts, 150 Max. Grid-No. 2 Volts, 150 Max. Peak Positive-Polar Plate Volts, 1500 (Abs.)							
12S8-GT	Triode-Diode High-Mu Triode	C6	8CB	H	12.6	0.15	Triode Unit as Class A Amplifier	100	- 1	—	—	0.4	11000	900	100	—	—
12SA7	Pentagrid Converter	B3	8R	H	12.6	0.15	Mixer	250	- 2	—	—	0.9	91000	1100	100	—	—
12SA7-GT	Twin-Triode Amplifier	B3	8AD	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SA7.									
125C7	Twin-Triode Amplifier	B3	8C	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 68C7.									
125F5	High-Mu Triode	B3	8AB	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68F5.									
125F5-GT	High-Mu Triode	C3	8AB ₂	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68F5.									
125F7	Diode-Remote-Cutoff Pentode	B3	7AZ	H	12.6	0.15	Pentode Unit as Amplifier	For other characteristics, refer to Type 68F7.									
125G7	Remote-Cutoff Pentode	B3	88K	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68G7.									
125H7	Sharp-Cutoff Pentode	B3	88K	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68H7.									
125J7	Sharp-Cutoff Pentodes	B3	88	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68J7.									
125J7-GT	Sharp-Cutoff Pentodes	C3	88 ₂	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68J7.									
125K7	Remote-Cutoff Pentodes	B3	88	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68K7.									
125K7-GT	Remote-Cutoff Pentodes	C3	88 ₂	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 68K7.									
125L7-GT	High-Mu Twin-Triode	C2	80D	H	12.6	0.15	Each Unit as Amplifier	For other characteristics, refer to Type 68L7-GT.									
125N7-GT	Medium-Mu Twin-Triode	C2	80D	H	12.6	0.3	Each Unit as Amplifier	For other characteristics, refer to Type 6J5.									
125Q7	Twin-Diode High-Mu Triode	B3	8Q	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 68Q7.									
125Q7-GT	Twin-Diode High-Mu Triode	B3	8Q ₂	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 68Q7.									
125R7	Twin-Diode High-Mu Triode	B3	8Q	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 68R7.									
125R7-GT	Twin-Diode High-Mu Triode	C3	8Q ₂	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 68R7.									

12U7	Medium-Mu Twin Triode	80a	7CK	H	10.0 to 15.9	0.15 approx. at 12.0 v	Each Unit as Class A Amplifier	12.6	0	—	—	1	12500	1600	20	—	—	
12V6-GT	Beam Power Amplifier	C2c	7AC1	H	12.6	0.225	Amplifier	For other characteristics, refer to Type 6V6										
12W6-GT	Beam Power Tube	C2c	7AC1	H	12.6	0.6	Vertical Deflection Amplifier	Triode	Max. DC Plate Volts, 300	Max. Plate Dissipation, 1.5 watts		Connection ¹ Max. DC Cathode Ma., 40					Max. Peak Pos.-Pulse Plate Volts, 1200 (Abs.)	
12X4	Full-Wave Rectifier	B1	5B5	H	12.6	0.225	Rectifier	For other characteristics, refer to Type 6X4.										
12Z3	Half-Wave Rectifier	D5	4C	H	12.6	0.3	With Capacitive- Input Filter	Max. AC Plate Volts (RMS), 235	Min. Total Effective Plate-Supply Impedance: Up to 117		volts, 0 ohms; at 150 volts, 30 ohms; at 235 volts, 75 ohms							
13DE7	Dual Triode With Dissimilar Units	B1a	6HF	H	13.0	0.45	Vertical Deflection Oscillator (See No. 1)	Max. Peak Neg.-Pulse Grid Volts, 400	Max. Plate Dissipation, 1.5 watts		Max. Peak Cathode Ma., 77							
							Vertical Deflection Amplifier (See No. 2)	Max. DC Plate Volts, 330	Max. Plate Dissipation, 1.5 watts		Max. Peak Pos.-Pulse Plate Volts, 1500							
14A4	Medium-Mu Triode	8a	8AC	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6J5.										
14A5	Beam Power Tube	85	8AA	H	12.6	0.15	Class A Amplifier	250	-12.5	250	3.5	30	70000	3000	—	7500	2.8	
14A7	Remote-Cutoff Pentode	85	8V	H	12.6	0.15	Class A Amplifier	100	-1.0	100	4.0	13.0	120000	2350	—	—	—	
14AF7	Medium-Mu Twin-Triode	85	8AC	H	12.6	0.15	Each Unit as Class A Amplifier	250	-3.0	100	2.6	9.2	800000	2000	—	—	—	
14B6	Duplex-Diode High-Mu Triode	85	8W	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6SQ7.										
14B8	Pentagrid Converter	89	8X	H	12.6	0.15	Converter	For other characteristics, refer to Type 6AB.										
14C5	Beam Power Tube	82	8AA	H	12.6	0.225	Class A Amplifier	180	-6.5	180	3.0	29.0	50000	3700	—	5500	2	
14C7	Sharp-Cutoff Pentode	88	8V	H	12.6	0.15	Class A Amplifier	315	-13	225	2.2	34.0	77000	3750	—	8500	5.5	
14E6	Twin-Diode Triode	88	8W	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6SR7.										
14E7	Twin-Diode Remote-Cutoff Pentode	88	8AE	H	12.6	0.15	Pentode Unit as Class A Amplifier	100	Cath. Bias	100	2.7	10.0	150000	1600	Cath. Res., 80 ohms			
14E7	Twin-Diode Remote-Cutoff Pentode	88	8AE	H	12.6	0.15	Pentode Unit as Class A Amplifier	250	Cath. Bias	100	1.6	7.5	700000	1300	Cath. Res., 330 ohms			
14F7	Twin-Triode Amplifier	88	8AC	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SL7-GT.										
14F8	Medium-Mu Twin-Triode	88b	8BW	H	12.6	0.15	Each Unit as Class A Amplifier	250	Cathode Bias Res., 500 ohms		6.0	—	3300	48	—	—		
14H7	Remote-Cutoff Pentode	88	8V	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 7H7.										
14J7	Triode-Heptode Converter	88	8BL	H	12.6	0.15	Converter	For other characteristics, refer to Type 7J7.										

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias in Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mhos	Amplification Factor	Load for Rated Power Output Ohms	Power Output Watts
		diam.	E.C.	C.T.	Vols	Amp.											
14N7	Twin-Triode Amplifier	02	8AC	H	12.6	0.3	Each Unit as Class A Amplifier										For other characteristics, refer to Type 6J5.
14Q7	Pentagrid Converter	08	8AL	H	12.6	0.15	Converter										For other characteristics, refer to Type 6SA7.
14R7	Twin-Diode Pentode	06	8AE	H	12.6	0.15	Pentode Unit as Class A Amplifier										For other characteristics, refer to Type 7R7.
15	RF Amplifier Pentode	09	8F	D.C. H	2.0	0.22	Class A Amplifier	67.5 135	-1.5 -1.5	67.5 67.5	0.3 0.3	1.85 1.85	630000 800000	710 750			
17AX4-GT	Half-Wave Rectifier	02b	4CG	Hb	16.8	0.45	Television Damper Service										Max. Peak Inverse Plate Volts, 4400 Max. Peak Plate Ma., 750 Max. DC Plate Ma., 125 Max. Peak Heater-Cathode Volts: -4000** +300 **DC component must not exceed 900 volts
17BQ6-GTB	Beam Power Tube	011	8AM	Hb	16.8	0.45	Horizontal Deflection Amplifier										Max. DC Plate Volts, 600 Max. DC Cathode Ma., 112.5 Max. Peak Positive-Pulse Plate Volts, 6000 (Abs.) Max. Plate Dissipation, 11 watts
17D4	Half-Wave Rectifier	02b	4CG	Hb	16.8	0.45	Television Damper Service										Max. Peak Inverse Plate Volts, 4400 (Abs.) Max. Peak Plate Ma., 900 Max. Average Plate Ma., 155 Max. Plate Dissipation, 5.5 watts
17DE4	Half-Wave Rectifier	010b	4CG	Hb	17.0	0.6	Television Damper Service										Max. Peak Inverse Plate Volts, 5000 Max. Peak Heater Cathode Volts, -5000 (DC Component Not to Exceed 900 Volts) Max. Peak Heater Cathode Volts, +300 (DC Component Not to Exceed 100 Volts) Max. DC Plate Ma., 175 Max. Peak Plate Ma., 1100
17DQ6-A	Beam Power Tube	05	8AM	Hb	16.8	0.45	Horizontal Deflection Amplifier										Max. DC Plate Volts, 700 Max. DC Cathode Ma., 140 Max. Peak Positive-Pulse Plate Volts, 6000 (Abs.) Max. Plate Dissipation, 15 watts
17H3	Half-Wave Rectifier	01a	8FK	Hb	17.5	0.3	Television Damper Service										Max. Peak Inverse Plate Volts, 2000 Max. Peak Plate Ma., 450 Max. Average Plate Ma., 75 Max. Plate Dissipation, 3 watts
18A5	Beam Power Tube	03	8CK	Hb	18.5	0.3	Horizontal Deflection Amplifier										Max. DC Plate Volts, 350 Max. DC Cathode Ma., 90 Max. Peak Pos.-Pulse Plate Volts, 3000 Max. Plate Dissipation, 9 watts
18FW6	Semi-remote-Cutoff Pentode	08	7CC	H	18.0	0.1	Class A Amplifier	180	Cath. Bias	100	4.4	11	250000	4400			Cath. Bias Res., 68 ohms
18FX6	Pentagrid Converter	00	7CH	H	18.0	0.1	Converter	100	-1.5	100	6.2	2.3	400000				Grid-No. 1 Resistor, 20000 ohms Conversion Transcon., 480 micromhos
18FY6	Twin Diode-High-Mu Triode	08	7BT	H	18.0	0.1	Triode Unit as Class A Amplifier	100	-1			.6	77000	1300	100		
19	Twin-Triode Amplifier	08	8C	D.C. P	2.0	0.26	Amplifier										For other characteristics, refer to Type 1J6-G.
19AU4	Half-Wave Rectifier	010b	4CG	Hb	18.0	0.6	Television Damper Service										Max. Peak Inverse Plate Volts, 4500 Max. Peak Plate Ma., 1050 Max. Peak Heater-Cathode Volts: -4500** +300 **DC component must not exceed 900 volts

19BG6-G 19BG6-GA	Beam Power Tubes	μ E	8BT	H	18.9	0.3	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Plate Current, 110 ma.	Max. Peak Positive-Pulse Plate Volts, 6600 (Abs.) Max. Plate Dissipation, 20 watts									
19J6	Medium-Mu Twin-Triode	80	7BF	H	18.9	0.15	Each Unit as Class A Amplifier	100	Cathode Bias Res., 50 ohms \pm		8.5	7100	5300	38	—	—		
19T8	Triode-Diode High-Mu Triode	80b	9E	H	18.9	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6T8.										
19X8	Triode-Pentode Converter	80b	9AK	H	18.9	0.15	For characteristics, refer to Type 6X8.											
20	Power Amplifier Triode	D1	4D	D.C. F	3.3	0.132	Class A Amplifier	90 135	-16.5 -22.5	—	—	3.0 6.5	8000 6300	415 525	3.3 3.3	9600 6500	0.045 0.110	
22	RF Amplifier Tetrode	E1	8K	D.C. F	3.3	0.132	Screen-grid RF Amplifier	135 135	-1.5 -1.5	45 67.5	0.6* 1.3*	1.7 3.7	725000 325000	375 500	—	—	—	
24-A	RF Amplifier Tetrode	E1	8E	H	2.5	1.75	Screen-Grid RF Amplifier	180 250	-3.0 -3.0	90 90	1.7* 1.7*	4.0 4.0	400000 600000	1000 1650	—	—	—	
25A6 25A6-GT	Power Amplifier Pentodes	C2a C3	7B 7B1	H	25.0	0.3	Class A Amplifier	95 160	-15.0 -18.0	95 120	4.0 6.5	20.0 33.0	45000 42000	2000 2375	—	—	4500 5000	0.9 2.2
25A7 GT	Rectifier Pentode	C3	8F	H	25.0	0.3	Pentode Unit as Class A Amplifier Half-Wave Rectifier	100	-15.0	100	4.0	20.5	50000	1800	—	—	4500	0.77
25AC5-GT	High-Mu Power Amplifier Triode	C3	8Q1	H	25.0	0.3	Dynamic-Coupled Amp. With Type 6AE5-GT Driver	110	Bias for both 25AC5-GT and 6AE5-GT developed in circuit. Average Plate Current of Driver = 7 milliamperes. Average Plate Current of 25AC5-GT = 45 milliamperes.						3000	3.0		
25AV5-GA	Beam Power Tube	81a	80K	H	25.0	0.3	Horizontal Deflection Amplifier	Max. DC Plate Volts, 550 Max. DC Cathode Ma., 110		Max. Peak Pos.-Pulse Plate Volts, 5500 (Abs.) Max. Plate Dissipation, 11 watts								
25AX4-GT	Half-Wave Rectifier	81b	400	H	25	0.3	Television Tuning Service Amplifier	Max. Peak Inverse Plate Volts, 4400 Max. Peak Plate Ma., 750 Max. DC Plate Ma., 125		Max. Peak Heater-Cathode Volts: $\begin{cases} -4400 \\ +300 \end{cases}$								
25B5	Direct-Coupled Power Amplifier	810	8D	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 25N6-G.										
25B6-O	Power Amplifier Pentode	811a	7B1	H	25.0	0.3	Class A Amplifier	105 200	-16.0 -21.0	105 135	2.0 1.8	48.0 62.0	15500 18000	4000 5000	—	—	1700 2500	2.4 7.1
25B8-GT	Triode-Pentode	C3	8T	H	25.0	0.15	Triode Unit as Class A Amplifier Pentode Unit as Class A Amplifier	100	-1.0	—	—	0.0	75000	1500	112	—	—	
25BK5	Beam Power Tube	81a	80Q	H	25.0	0.3	Class A Amplifier	250	-5	250	3.5	35	100000	8500	—	—	6500	3.5
25BQ6-GT 25BQ6-GTB/ 25CU6	Beam Power Tubes	C11	8AM	H	25.0	0.3	Horizontal Deflection Amplifier	Max. DC Plate Volts, 600 Max. DC Cathode Ma., 112.5		Absolute Max. Peak Positive-Pulse Plate Volts, 6000 Max. Plate Dissipation, 11 Watts								

Discontinued types are shown in heavy lines.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values in right glass operating conditions and dimensions for indicated typical use	Plate Supply Volts	Grid Bias in Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ ohms	Amplification Factor	Load or Rated Power Output Ohms	Power Output Watts
		Dimm.	S. C.	E. T.	Volts	Ans.											
25C5	Beam Power Tube	B1	7CV	H	25.0	0.3	Class A Amplifier	120	- 8	110	4	49	10000	7500	—	2500	2.3
25C6-G	Beam Power Tube	D11c	7AC1	H	25.0	0.3	Class A Amplifier	For other characteristics, refer to Type 6Y6-G.									
25CA5	Beam Power Tube	B1	7CV	H	25.0	0.3	Class A Amplifier	110 125	- 4 - 4.5	110 125	3.5 4	32 37	16000 15000	8100 9200	— —	3500 4500	1.1 1.5
25CD6-GA 25CD6-GB	Beam Power Tubes	F1 E8	6B7	H0 H0	25	0.6	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Plate Ma., 170			Max. Peak Positive-Pulse Plate Volts, 6000 (Abs.) Max. Plate Dissipation, 15 Watts						
25DN6	Beam Power Tube	E	6B7	H0	25.0	0.6	Horizontal Deflection Amplifier	Max. DC Plate Volts, 700 Max. DC Cathode Ma., 200			Max. Peak Positive-Pulse Plate Volts, 6600 (Abs.) Max. Plate Dissipation, 15 Watts						
25EH5	Power Pentode	B1	7CV	H	25.0	0.3	Class A Amplifier	110	Cath. Res. 62 ohms	115	11.5	42	11000	14600	—	8000	1.4
25L6	Beam Power Tube	C8a	7AC	H	25.0	0.3	Amplifier	110 200	- 7.5 - 8.0	110 110	4.0 2.0	49.0 50.0	13000 30000	9000 9500	— —	2000 3000	2.1 4.3
25L6-GT	Beam Power Tube	C8a	7AC1	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 30L6-GT.									
25N6-G	Direct-Coupled Power Amplifier	D8	7W	H	25.0	0.3	Class A Amplifier	Output Triode: Plate Volts, 180; Plate Ma., 46; Load, 4000 ohms. Triode: Plate Volts, 100; Grid Volts, 0; A-F Signal Volts (Peak), 29.7; Plate Ma., 5.8.									
25W4-GT	Half-Wave Rectifier	C8a	40B	H	25.0	0.3	With Capacitive-Input Filter	Max. AC Plate Volts (RMS), 350		Max. DC Output Ma., 125		Min. Total Effect. Supply Imped. per Plate, 145 ohms					
25Y5	Rectifier-Doubler	D5	6E	H	25.0	0.3	Half-Wave Rectifier	Max. AC Volts per Plate (RMS), 235		Min. Total Effective Plate-Supply Impedance per Plate, 9 ohms.		Max. DC Output Ma. per Plate, 75					
25Z5	Rectifier-Doubler	D5	6E	H	25.0	0.3	Rectifier-Doubler	For other ratings, refer to Type 25Z6.									
25Z6 25Z6-GT	Vacuum Rectifier-Doublers	C2a C2c	7Q 7Q1	H	25.0	0.3	Voltage Doubler Half-Wave Rectifier	Max. AC Volts per Plate (RMS), 117		Min. Total Effective Plate-Supply Impedance: Half-Wave, 30 ohms; Full-Wave, 15 ohms.		Max. DC Output Ma., 75					
26	Amplifier Triode	D12a	4D	F	1.5	1.05	Class A Amplifier	90 180	- 7.0 - 14.5	—	—	2.9 6.2	8900 7300	935 1150	8.3 8.3	—	—
27	Detector* Amplifier Triode	D8	6A	H	2.5	1.75	Class A Amplifier His Detector	135 250	- 9.0 - 21.0	—	—	4.5 5.2	9000 9250	1000 975	9.0 9.0	—	—
30	Medium-Mu Triode	D8	4D	D.C. F	2.0	0.06	Amplifier	Plate current to be adjusted to 0.2 milliamperes with no signal.									
For other characteristics, refer to Type 1H4-G.																	

31	Power Amplifier Triode	D6	4D	D.C. F	2.0	0.13	Class A Amplifier	135	-22.5	—	—	8.0	4100	925	3.8	7000	0.183
								180	-30.0	—	—	12.3	3600	1050	5.8	5700	0.375
32	RF Amplifier Tetrode	E1	4K	D.C. F	2.0	0.06	Screen-Grid RF Amplifier	135	-3.0	67.5	0.4	1.7	950000	640	—	—	—
								180	-3.0	67.5	0.4	1.7	1.0+ $\frac{1}{2}$	650	—	—	—
							Bias Detector	180	-6.0 (approx.)	67.5	—	Plate current to be adjusted to 0.2 milliampere with no signal.					
32ET6	Beam Power Tube	B1	7CV	H	32.0	0.1	Class A Amplifier	110	-7.5	110	2.8	30	21500	5500	—	2800	1.2
32L7-GT	Rectifier-Beam Power Amplifier	C3	8Z	H	32.5	0.3	Amplifier Unit as Class A Amplifier	90	-5.0	90	3.0	38.0	15000	6000	—	2600	0.8
								90	-7.0	90	2.0	27.0	17000	4800	—	2600	1.0
							Half-Wave Rectifier	Maximum AC Plate Voltage _____ 125 Volts, RMS Maximum DC Output Current _____ 60 Milliamperes.									
33	Power Amplifier Pentode	D1a	8K	D.C. F	2.0	0.26	Class A Amplifier	180	-18.0	180	5.0	22.0	55000	1700	—	6000	1.5
34	Remote-Cutoff Pentode	E1	4M	D.C. F	2.0	0.06	Screen-Grid RF Amplifier	135	-3.0	67.5	1.0	2.8	600000	600	—	—	—
								180	min.	67.5	1.0	2.8	1.0 $\frac{1}{2}$	620	—	—	—
35	Remote-Cutoff Triode	E1	8E	H	2.5	1.75	Screen-Grid RF Amplifier	180	-3.0	90	2.5*	6.3	300000	1020	—	—	—
								250	min.	90	2.5*	6.5	400000	1050	—	—	—
35A5	Beam Power Tube	C2	6AA	H	35.0	0.15	Single-Tube Class A Amplifier	For other characteristics, refer to Type 35L6-GT.									
35B5	Beam Power Tube	B1	7BZ	H	35.0	0.15	Class A Amplifier	For other characteristics, refer to Type 35C5.									
35C5	Beam Power Tube	B1	7CV	H	35.0	0.15	Class A Amplifier	110	-7.5	110	3.0	40.0	13000	5800	—	2500	1.5
35L6-GT	Beam Power Tube	C6b	7AC1	H	35.0	0.15	Single-Tube Class A Amplifier	110	-7.5	110	3.0	40.0	14000	5800	—	2500	1.5
								200	Δ	125	2.0	43.0	34000	8100	—	5000	3.0
35W4	Half-Wave Rectifier Heater Tap for Pilot	B1	50Q	H	35.0	0.15	With Capacitive- Input Filter	Max AC Plate Volts (RMS), 117. Min. Total Effect. Plate-Supply Impedance, 15 ohms. Max. DC Output Ma.: With Pilot and No Shunt Res., 60; With Pilot and Shunt Res., 90; Without Pilot, 100.									
35Y4	Half-Wave Rectifier Heater Tap for Pilot	C2	5AL	H	35.0	0.15	With Capacitive- Input Filter	Pilot Between Pins 4 and 6 For other characteristics, refer to Type 35W4.									
35Z3	Half-Wave Rectifier	C2	6Z	H	35.0	0.15	With Capacitive- Input Filter	Pilot Between Pins 1 and 4 For other ratings, refer to Type 35Z4-GT.									
35Z4-GT	Half-Wave Rectifier	C6b	6AA	H	35.0	0.15	With Capacitive- Input Filter	Max. AC Plate Volts (RMS), 235. Min. Total Effective Plate-Supply Impedance: Up to 117 Max. DC Output Ma., 100 volts, 15 ohms; at 235 volts, 100 ohms.									
35Z5-GT	Half-Wave Rectifier Heater Tap for Pilot	C2c	6AD	H	35.0	0.15	With Capacitive- Input Filter	Max. AC Plate Volts (RMS), 235. Min. Total Effect. Plate-Supply Imped.: Up to 117 volts, 15 ohms; at 235 volts, 100 ohms. Max. DC Output Ma.: With Pilot and No Shunt Res., 60; With Pilot and Shunt Res., 90; Without Pilot, 100.									
36	RF Amplifier Tetrode	D8	8E	H	8.3	0.3	Screen-Grid RF Amplifier	100	-1.5	55	—	1.8	550000	850	—	—	—
								250	-3.0	90	1.7*	3.2	550000	1080	—	—	—
							Bias Detector	250	-8.0	90	—	—	Grid-bias values are approx. Plate Ma. to be set to 0.1 with no signal.				
36AM3	Half-Wave Rectifier	B1	8BQ	H	36.0	0.1	With Capacitive- Input Filter	Max AC Plate Volts (RMS), 117. Min. Total Effect. Plate-Supply Impedance, 45 ohms. Max. DC Output Ma., 82									

Discontinued types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias μ Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance (Ohms)	Trans-conductance (ohm-plate) μ ohms	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Ømm.	Ø C.	C.T.	Volts	Amp.											
37	Detector & Amplifier Triode	D5	5A	H	6.3	0.3	Class A Amplifier	90	-6.0	—	—	2.5	11500	800	9.2	—	—
								250	-18.0	—	—	7.5	8100	1100	9.2	—	—
38	Power Amplifier Pentode	D9	5F	H	6.3	0.3	Class A Amplifier	100	-9.0	100	1.2	7.0	140000	875	—	15000	0.27
								250	-75.0	250	3.8	22.0	100000	1700	—	10000	2.50
39-44	Resistor-Cutoff Pentode	D9	5F	H	6.3	0.3	Class A Amplifier	90	-3.0	90	1.6	5.6	48000	1000	—	—	—
								250	min.	90	1.4	5.8	1.01	1050	—	—	—
40	Medium-Mu Triode	D12a	4D	D.C. F	5.0	0.25	Class A Amplifier	135 μ	-1.5	—	—	0.2	150000	200	30	—	—
180 μ	-3.0	—	—	0.2	150000	200	30	—	—	—							
41	Power Amplifier Pentode	D5	6B	H	6.3	0.4	Amplifier	For other characteristics, refer to Type 6K6-GT.									
42	Power Amplifier Pentode	D12a	6B	H	6.3	0.7	Amplifier	For other characteristics, refer to Type 6F6-G.									
43	Power Amplifier Pentode	D12a	6B	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 25A6.									
45	Power Amplifier Triode	D12a	4D	F	2.5	1.5	Class A Amplifier	180	-31.5	—	—	31.0	1650	2125	3.5	2700	0.82
								275	-56.0	—	—	36.0	1700	2050	3.5	4600	2.00
45Z3	Half-Wave Rectifier	B0	5AM	H	45.0	0.075	Half-Wave Rectifier	Max. AC Plate Volts (RMS), 117		Max. DC Output Ma., 65		Min. Total Effect. Plate-Supply Imped., 15 ohms					
45Z5-GT	Half-Wave Rectifier Heater Tap for Pilot	C2c	6AD	H	45.0	0.15	With Capacitive-Input Filter	For other ratings, refer to Type 35Z5-GT.									
								Pilot Between Pins 2 and 3									
46	Dual-Grid Power Amplifier	E3a	5C	F	2.5	1.75	Class A Amplifier	250	-33.0	—	—	22.0	2380	2350	5.6	6400	1.25
								300	0	—	—	8.0 \uparrow	—	—	—	5200	16.0 \uparrow
47	Power Amplifier Pentode	E3a	5B	F	9.5	1.75	Class A Amplifier	250	-16.5	250	6.0	31.0	60000	2500	—	7000	2.7
48	Power Amplifier Tetrode	E3a	6A	D.C. H	30.0	0.4	Class A Amplifier	125	-20.0	100	9.5	56.0	—	3900	—	1500	2.5
49	Dual-Grid Power Amplifier	D12a	5C	D.C. F	2.0	0.12	Class A Amplifier	135	-20.0	—	—	6.0	4175	1125	4.7	11000	0.17
								180	0	—	—	4.0 \uparrow	—	—	—	12000	3.5 \uparrow
50	Power Amplifier Triode	F1a	4D	F	7.5	1.25	Class A Amplifier	300	-54.0	—	—	35.0	2000	2000	3.8	4600	1.6
								450	-84.0	—	—	55.0	1800	2100	3.8	4350	4.6
50A5	Beam Power Tube	C2	8AA	H	50.0	0.15	Class A Amplifier	For other characteristics, refer to Type 50L6-GT.									
50B5	Beam Power Tube	B1	7B2	H	50.0	0.35	Class A Amplifier	For other characteristics, refer to Type 50C5.									
50C5	Beam Power Tube	B1	7CV	H	50.0	0.15	Class A Amplifier	120	-8	110	4.0	49.0	10000	7500	—	2500	2.3

50C6-G	Beam Power Tube	D11c	7AC	H	50.0	0.15	Single-Tube Class A Amplifier	135 200	-13.5 -14.0	135 135	3.5 2.2	58.0 61.0	9300 18300	7000 7100	— —	2000 2600	3.6 6.0
50DC4	Half-Wave Rectifier Heater Tap for Pilot	B1	8BQ	H	50.0	0.15	With Capacitive Input Filter	For operation with panel lamp: Filter-Input Capacitor, 40 μ f AC Plate-Supply Volts (RMS), 117									
50EH5	Power Pentode	B1	7CV	H	50.0	0.15	Class A Amplifier	110	Cath Res. 62 ohms	115	11.5	42	11000	14600	—	8000	1.4
50L6-GT	Beam Power Tube	C2c	7AC1	H	50.0	0.15	Single-Tube Class A Amplifier	100 200	-7.5 Δ	110 125	4.0 2.2	49.0 46.0	13000 28000	8000 8000	—	2000 4000	2.1 3.8
50X6	Rectifier-Doubler	C2	7DX	H	50.0	0.15	Rectifier-Doubler	Max. AC Volts per Plate (RMS), 117 Max. DC Output Ma., 75									
							Half-Wave Rectifier	Max. AC Volts per Plate (RMS), 235 Max. DC Output Ma. per Plate, 75									
50Y6-GT	Rectifier-Doubler	C2b	7D1	H	50.0	0.15	Rectifier-Doubler	Min. Total Effective Plate-Supply Impedance: Half-Wave, 30 ohms; Full-Wave, 15 ohms									
50Y7-GT	Rectifier-Doubler Heater Tap for Pilot	C2c	6AN	H	50.0	0.15	Voltage Doubler	Max. AC Volts per Plate (RMS), 117 Max. DC Output ma., 65									
							Half-Wave Rectifier	Max. AC Volts per Plate (RMS), 235 Max. DC Output Ma. per Plate, 65									
50Z7-G	Rectifier-Doubler Heater Tap for Pilot	D3	6AN	H	50.0	0.15	Voltage Doubler	Min. Total Effect. Plate-Supply Imped. per Plate: Up to 117 volts, 15 ohms; at 150 volts, 40 ohms; at 235 volts, 100 ohms									
							Half-Wave Rectifier	Max. AC Volts per Plate (RMS), 117 Max. DC Output Ma., 65									
53	Twin-Triode Amplifier	D12a	7B	H	2.5	2.0	Amplifier	Min. Total Effective Plate-Supply Impedance: 15 ohms									
55	Duplex-Diode Triode	D8	6B	H	2.5	1.0	Triode Unit as Amplifier	Max. AC Volts per Plate (RMS), 235 Max. DC Output Ma. per Plate, 65									
56	Medium-Freq Triode*	D5	6A	H	2.5	1.0	Amplifier Detector	Min. Total Effective Plate-Supply Impedance: 15 ohms									
57	Sharp-Cutoff Pentode	D12a	6F	H	2.5	1.0	Amplifier Detector	Up to 117 volts, 15 ohms; at 235 volts, 100 ohms									
58	Remote-Cutoff Pentode	D12a	6F	H	2.5	1.0	Amplifier Mixer	For other characteristics, refer to Type 6N7-GT.									
59	Triode-Grid Power Amplifier	D2b	7A	H	2.5	2.0	Triode-Grid Class A Amplifier	250	-28.0	—	—	26.0	2300	2600	6.0	5000	1.25
							Class A Amplifier	250	-18.0	250	9.0	35.0	55000	2500	—	6000	3.0
70L7-GT	Rectifier-Beam Power Amplifier	C10	6AA	H	70.0	0.15	Amplifier Unit as Class A Amplifier	110	-7.5	110	3.0	40.0	15000	7500	—	2000	1.0
							Half-Wave Rectifier	Max. AC Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350									
71-A	Power Amplifier Triode	D12a	6B	F	5.0	0.25	Class A Amplifier	90 180	-16.5 -40.5	—	—	10.0 20.0	2170 1750	1400 1700	3.0 3.0	3000 4800	0.125 0.790

Discontinued types are shown in light face.

Part No.	Description	QTY	UNIT	DATE	PRICE	TOTAL	REMARKS	EXT
117N7-GT	Rectifier-Transm	1	EA	117	0.09		Max AC Plate Volts (RMS), 117 Max DC Output Ma, 75 Min. Total Effect. Plate Supply Impedance, 15ohms	1.2
117P7-GT	Rectifier-Transm	1	EA	117	0.09		Max AC Plate Volts (RMS), 117 Max DC Output Ma, 75 Min. Total Effect. Plate Supply Impedance, 15ohms	1.2
117Z3	Half-Wave Rectifier	1	EA	117	0.04		Max AC Plate Volts (RMS), 117 Max DC Output Ma, 90 Min. Total Effect. Plate Supply Imped, 30 ohms	6.7
117Z4-GT	Half-Wave Rectifier	1	EA	117	0.04		Max AC Plate Volts (RMS), 117 Max DC Output Ma, 90 Min. Total Effect. Plate Supply Imped, 30 ohms	6.7
117Z6-GT	Rectifier-Transformer	1	EA	117	0.07		Max AC Volts per Plate (RMS), 117 Max DC Output Ma, 60 Min. Total Effective Plate Supply Impedance per Plate Half-Wave, 30 ohms; Full-Wave, 15 ohms	11.3
5879	Transformer-Plate	1	EA	6.3	0.15		Max AC Plate Volts (RMS), 250 Max DC Output Ma, 250 Min. Total Effect. Plate Supply Impedance, 1000 1.8 28 30000 6100 5200 5500 21500 23500 2700 5700	6.7
5881	Beam Power Tube	1	EA	6.3	0.9		Max AC Plate Volts (RMS), 250 Max DC Output Ma, 250 Min. Total Effect. Plate Supply Impedance, 1500 1.8 28 30000 6100 5200 5500 21500 23500 2700 5700	11.3
6973	Beam Power Tube	1	EA	6.3	0.45		Max AC Plate Volts (RMS), 300 Max DC Output Ma, 310 Min. Total Effect. Plate Supply Impedance, 270 ohms 5.500 6000 17 12.5 8000 18 6000 26.5 3800 18 8000 12.5 6000 17 12.5	18.5
7025	Electro-Valve	1	EA	6.3	0.15		Max AC Plate Volts (RMS), 100 Max DC Output Ma, 370 Min. Total Effect. Plate Supply Impedance, 13009 1.5 100 370 13009	15
7027	Beam Power Tube	1	EA	6.3	0.8		Max AC Plate Volts (RMS), 400 Max DC Output Ma, 400 Min. Total Effect. Plate Supply Impedance, 200 ohms 4500 6000 50 31.5 4500 50 31.5	31.5
7027-A	Beam Power Tube	1	EA	6.3	0.8		Max AC Plate Volts (RMS), 400 Max DC Output Ma, 400 Min. Total Effect. Plate Supply Impedance, 220 ohms 4500 6000 50 31.5 4500 50 31.5	31.5

For other characteristics, refer to Type 117Z1, M7-GT.

Measurement types are shown in light face.

Type	Name	Tube Dimensions and Socket Connections		Cathode Type and Rating			Use Values to right give operating conditions and characteristics for indicated typical use	Plate Supply Volts	Grid Bias Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance (Grid-plate) μ mhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts
		Dimm.	S.C.	C.T.	Volts	Ampl.											
7189	Beam Power Tube	6Ba	9BL	H	6.3	0.76	Push-Pull Class AB ₁ Amplifier	400	-15	300	1.6A	15A	—	—	—	8000	241
7199	Medium-Mu Triode Sharp-Cutoff Pentode	6Ba	9J7	H	6.3	0.45	Triode Unit as Class A Amplifier	215	-8.5	—	—	9	8100	2100	17	—	—
							Pentode Unit as Class A Amplifier	100 290	Cath. Bias	50 130	.35 3.5	1.1 12.5	16 400000	1500 7000	Cath. Bias Res., 1000 ohms Cath. Bias Res., 62 ohms		
EN84/ 6FG6	Electron-Ray Tube	6Ba	9GA	H	6.3	0.27	Visual Indicator	Triode Plate Supply Volts, 250 Triode-Plate Resistance, 1 meg. Triode Grid-Supply Volts, -22		Fluorescent-Target Volts, 250 Triode-Grid Resistance, 0.47 meg. Fluorescent Target Ma., 1.6 Max. Length of Dark Part of Target, when triode grid resistor = 0, 1.14 inch		Triode Plate Ma., 0.06 Fluorescent Target Ma., 1.6					

KEY TO TUBE DIMENSIONS

Symbol	Maximum Overall Length	x	Maximum Overall Diameter	Symbol	Maximum Overall Length	x	Maximum Overall Diameter	Symbol	Maximum Overall Length	x	Maximum Overall Diameter	Symbol	Maximum Overall Length	x	Maximum Overall Diameter
A	1-3/4"	x	3/8"	B5	2-25/32"	x	1-3/16"	C5	3-7/16"	x	1-9/32"	D5	4-3/16"	x	1-9/16"
A1	1-3/4"	x	3/4"	B5a	2-27/32"	x	7/8"	C9a	3-7/16"	x	1-5/16"	D6	4-1/4"	x	1-9/16"
A1a	1-3/4"	x	7/8"	B5b	2-7/8"	x	7/8"	C9b	3-15/32"	x	1-7/16"	D7	4-5/16"	x	1-5/8"
A1b	1-3/4"	x	1-5/16"	B5c	2-7/8"	x	1-5/16"	C9c	3-1/2"	x	1-1/16"	D8	4-15/32"	x	1-9/16"
B0	2-1/8"	x	3/4"	C0	3"	x	1-9/32"	C10	3-9/16"	x	1-9/32"	D9	4-17/32"	x	1-9/16"
B0a	2-3/16"	x	7/8"	C0a	3-1/16"	x	7/8"	C10a	3-9/16"	x	1-5/16"	D10	4-19/32"	x	1-9/16"
B0b	2-9/32"	x	1-3/16"	C0b	3-1/16"	x	1-9/32"	C10b	3-13/16"	x	1-9/32"	D11	4-5/8"	x	1-9/16"
B0c	2-5/16"	x	1-9/32"	C1	3-1/8"	x	1-5/16"	C11	3-7/8"	x	1-9/32"	D11a	4-5/8"	x	1-5/8"
B1	2-5/8"	x	3/4"	C2	3-5/32"	x	1-3/16"	C11a	3-7/8"	x	1-3/16"	D11b	4-5/8"	x	1-23/32"
B1a	2-5/8"	x	7/8"	C2a	3-1/4"	x	1-5/16"	D1	4"	x	1-3/16"	D11c	4-3/8"	x	1-13/16"
B2	2-5/8"	x	1-1/16"	C2b	3-9/32"	x	7/8"	D1a	4"	x	1-9/16"	D12	4-11/16"	x	1-7/16"
B3	2-5/8"	x	1-5/16"	C2c	3-5/16"	x	1-9/32"	D2	4-1/16"	x	1-9/32"	D12a	4-11/16"	x	1-13/16"
B4	2-11/16"	x	7/8"	C3	3-5/16"	x	1-5/16"	D2a	4-1/8"	x	1-3/16"	D12b	4-3/4"	x	1-9/16"
B4a	2-3/4"	x	7/8"	C4	3-3/8"	x	1-9/32"	D3	4-1/8"	x	1-9/16"	D12c	4-3/4"	x	1-23/32"
								D4	4-3/16"	x	1-3/16"				
												D13	4-7/8"	x	1-9/16"
												D13a	4-15/16"	x	1-9/16"
												E	5"	x	1-9/16"
												E0	5"	x	1-23/32"
												E0a	5-1/8"	x	1-23/32"
												E0b	5-1/8"	x	2-1/16"
												E1	5-1/32"	x	1-13/16"
												E1a	5-7/32"	x	1-23/32"
												E2	5-5/16"	x	1-1/16"
												E3	5-5/16"	x	2-1/16"
												E3a	5-3/8"	x	2-1/16"
												F1	5-11/16"	x	2-1/16"
												F1a	6-1/4"	x	2-7/16"
												G1	8"	x	2-1/16"

Light Face = Discontinued type.

For key to tube dimensions and, legend for base and envelope connection diagrams, see pages and

■ Either ac or dc may be used on filament or heater, except as specifically noted. For use of dc on ac filament types, decrease stated grid volts by $\frac{1}{2}$ (approx.) of filament voltage.

● Heater has controlled warm-up time for series-string operation.

Types with octal bases have *Miniature Cap*; all others have *Small Cap*.

⊙ For use in automobile receivers which operate directly from 12-volt storage batteries.

▲ Grids *S* 2 and *S* 4 are screen. Grid *S* 3 is signal-input control grid.

● Grids *S* 3 and *S* 5 are screen. Grid *S* 4 is signal-input control grid.

□ Grid *S* 2 tied to plate.

•• Grid *S* 1 is control grid. Grid *S* 2 is screen. Grid *S* 3 tied to cathode.

‡ Grid *S* 1 is control grid. Grids *S* 2 and *S* 3 tied to plate.

▲ Grids *S* 2 and *S* 4 are screen. Grid *S* 1 is signal-input control grid.

♠ Grids *S* 1 and *S* 2 tied together.

⊞ Applied through plate resistor of 250000 ohms.

⊟ Supply voltage applied through 20000-ohm voltage-dropping resistor.

▽ Applied through plate resistor of 100000 ohms.

♣ Obtained preferably by using 70000-ohm voltage-dropping resistor in series with a 90-volt supply.

Note: $\bar{1}$ Subscript 1 on class of amplifier service (as AB $\bar{1}$) indicates that grid current does not flow during any part of input cycle.

‡ This diagram is like the one having the same designation except that Pin No. 1 has no connection.

⊞ This diagram is like the one having the same designation except that base sleeve is connected to Pin No. 1.

△ Cathode-bias resistor, 100 ohms.

‡ Megohms.

• Maximum.

♣ For two tubes.

‡ Power output is for two tubes at stated plate-to-plate load.

+ Each unit.

S Value is for both units operating at the specified conditions.

AA Both grids connected together; likewise both cathodes.

‡ For signal-input control-grid (*S* 1); control-grid *S* 3 bias, -3 volts.

• Both grids connected together; likewise, both plates.

★ For Grid-leak Detection—plate volts, 45; grid return to + filament or to cathode.

•• For grid of following tube.

✓ With separate excitation and triode unit grounded.

⊞ 50000 ohms.

> Mercury-Vapor Type.

♣ For television damper service.

⊙ Superseded by 10-Y. See Power and Gas Tubes Booklet PG-101D.

■ With tube mounted horizontally and pins No. 4 and No. 8 in a vertical plane (pin No. 4 on top), deflecting electrode No. 1 controls left-hand section of pattern, deflecting electrode No. 2 controls top right-hand section of pattern, deflecting electrode No. 3 controls bottom section of pattern.

⊞ Grid-No. 2 of each tube connected to tap on plate winding of output transformer. This arrangement permits approximately 40% to 50% of the plate signal voltage to be applied to Grid-No. 2 of each output tube.

‡‡ This diagram is like the one having the same designation except that Pin No. 1 is connected to internal shield.

LEGEND FOR BASE AND ENVELOPE CONNECTION DIAGRAMS

Bottom Views

Subscripts B, D, HP, HX, P, T, and TR indicate, respectively, beam unit, diode unit, heptode unit, hexode unit, pentode unit, triode unit, and tetrode unit in multi-unit types.

BC - Base Sleeve

BS - Base Shell

DJ - Deflecting Electrode

ES - External Shield

F - Filament

F_M - Filament Mid-Tap

FT - Fluorescent Target

G - Grid

H - Heater

H_L - Heater Tap for
Panel Lamp

H_M - Heater Mid-Tap

HS - Heater Shield

IC - Internal Connection-
Do Not Use

IS - Internal Shield

K - Cathode

NC - No Connection

P - Plate (Anode)

RC - Ray-Control Electrode

S - Shell

TA - Target

U - Unit

● - Gas-Type Tube



3C



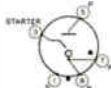
4AA



4AD



4B



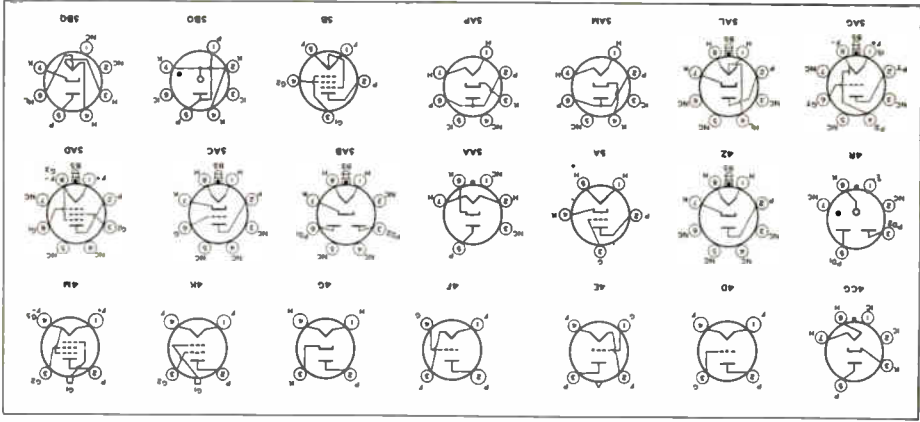
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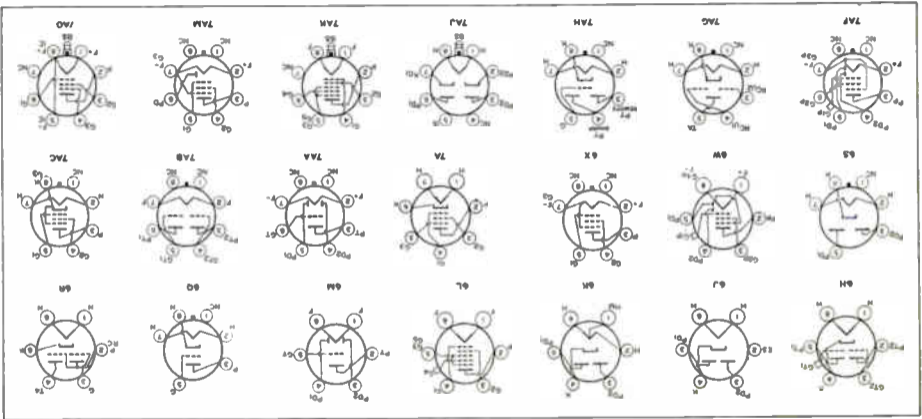


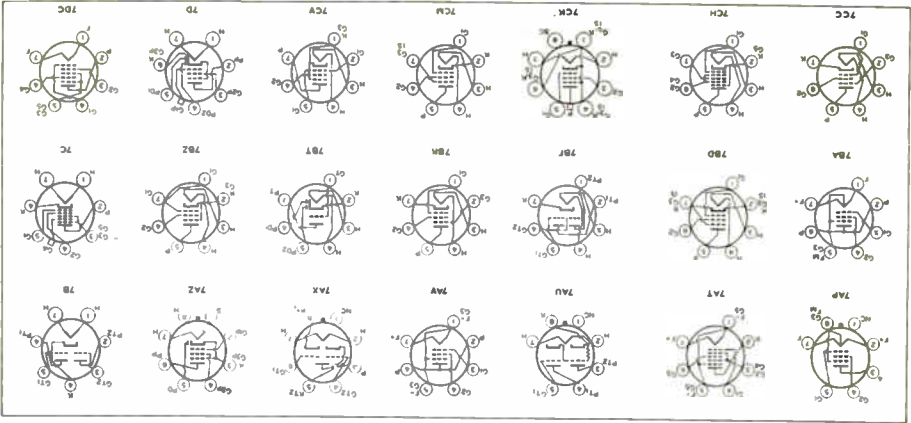
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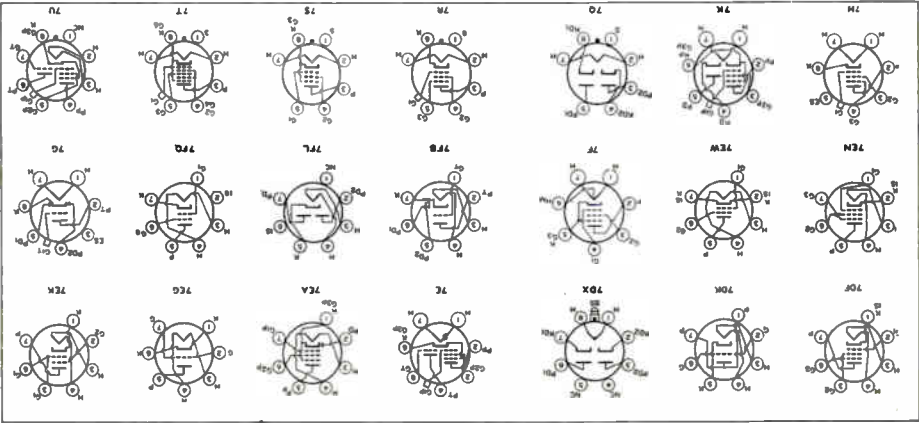


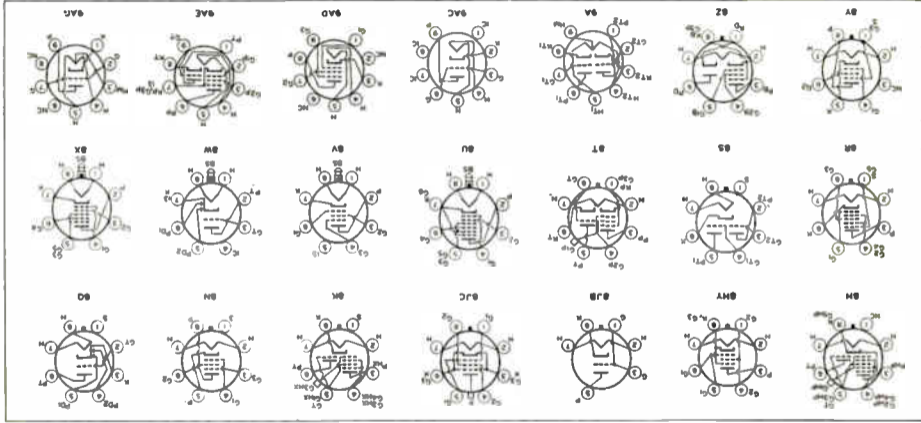
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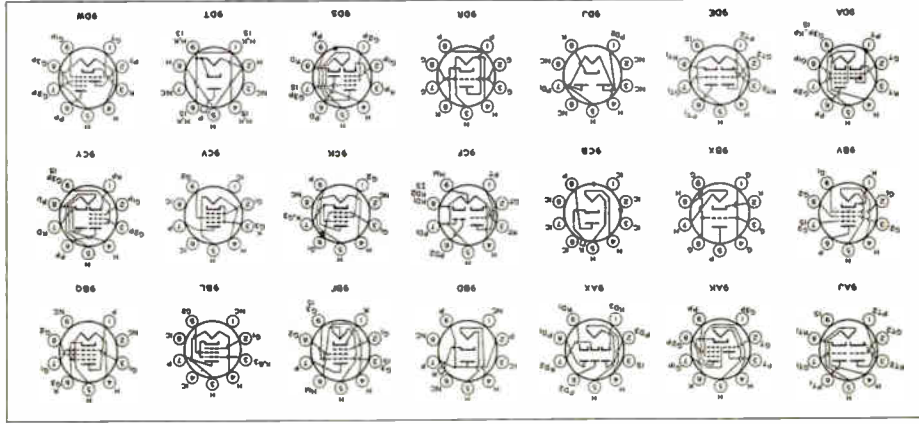


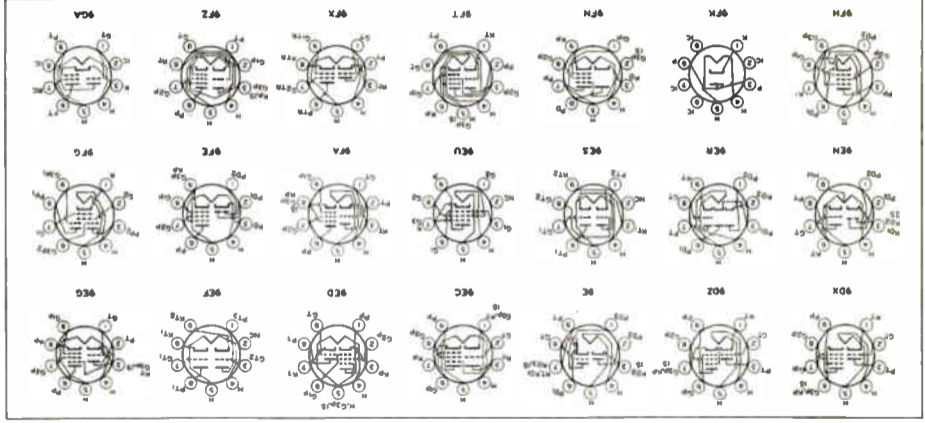


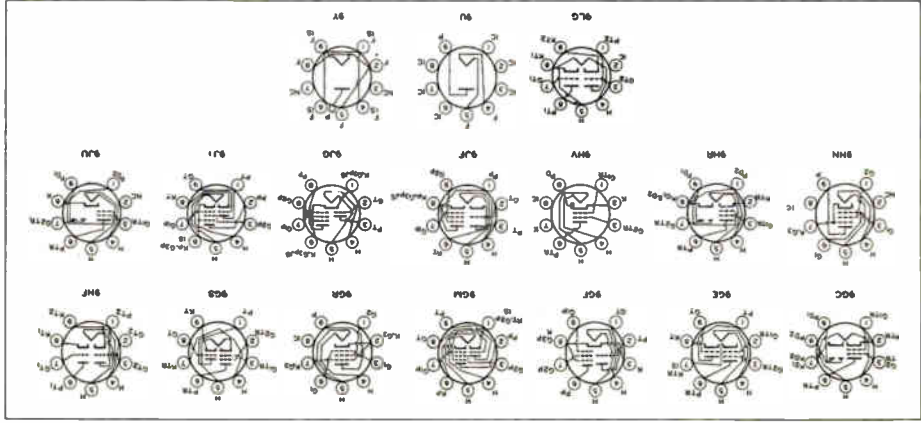












PICTURE

TUBE

CHARACTERISTICS


CHART

SECTION

RCA PICTURE TUBE CHARACTERISTICS CHART

Type	Envelope	Minimized Screen	Faceplate	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Incher				Neck Length Incher	Minimum Screen Size Incher
				Max. <small>rad.</small>	Min. <small>rad.</small>			Htg.	Widt.	Vert.	Overall Length	Envelope Dia. or Diameter	Width	Height		
Black-and-White Types																
5TP4*	Ⓒ	Yes	CL	500	100	E	M	—	50	—	12½	5½	—	—	7½	4½ Dia.
7DP4	Ⓒ	No	CL	1500	400	E	M	—	50	—	14½	7½	—	—	8½	6½ Dia.
7JP4	Ⓒ	No	CL	None	None	E	E⊙	—	—	—	14½	7½	—	—	—	6 Dia.
8DP4	Ⓚ	No	PG	350	250	E	M	90	85	68	10½	8½	7½	6½	6½	7½ x 5½
9AP4x	Ⓒ	No	CL	None	None	E	M	—	40	—	21½	9½	—	—	10	7½ Dia.
10BP4	Ⓒ	No	Same as 10BP4-A, except has clear glass faceplate.													
10BP4-A	Ⓒ	No	PG	2500	500	M	M	—	50	—	18	10½	—	—	8½	9½ Dia.
10FP4-A	Ⓒ	Yes	PG	2500	500	M	M	—	50	—	18	10½	—	—	8½	9½ Dia.
12AP4x	Ⓒ	No	CL	None	None	E	M	—	40	—	25½	12½	—	—	9½	10½ Dia.
12KP4-A	Ⓒ	Yes	PG	2500	500	M	M	—	54	—	18	12½	—	—	7½	11½ Dia.
12LP4	Ⓒ	No	Same as 12LP4-A, except has clear glass faceplate.													
12LP4-A	Ⓒ	No	PG	3000	750	M	M	—	54	—	19½	12½	—	—	8½	11 Dia.
14ATP4 ^u	Ⓚ	Yes	PG	1000	500	E	M	90	85	68	13½	14½	13½	10½	5½	12½ x 9½
14BP4	See 14EP4/14CP4/14BP4.															
14CP4	See 14EP4/14CP4/14BP4.															
14EP4	See 14EP4/14CP4/14BP4.															

Data for these types continued on next page.

High Voltage Terminal	Bas-ing	Maximum Ratings							Typical Operating Conditions in Grid-Drive Service				P M Ion-Trap Magnet Infr. Geomax	 Type
		First High Voltage Electrode (V _{1st})	Penning Electrode V ₁	Grid No. 2 V ₂	Grid No. 1 V ₁	First Heater Cathode V ₁			First High Voltage Electrode (V _{1st}) V ₁	Grid No. 2 V ₂	Penning Electrode V ₁	Grid No. 1 V ₁ For Worst Estimate of Power Factor		
						B ₁ (-)	A ₁ (-)	B ₁ (+)						
Black-and-White Types														
Cavity Cap	B	27000	6000	350	-150	410	175	10	27000	200	4320 to 5400	-37 to -93	None	5TP4 ⁺
Cavity Cap	B	8000	2400	410	-125	410	150	150	6000	250	1215 to 1645	-22 to -58	—	7DP4
Base Pin	C	6000	2800	—	-200	410	125	125	6000	—	1620 to 2400	-67 to -163	None	7JP4
Cavity Cap	J	8000	+500 -500	300	-100	—	180	180	8000 8000	150 200	+15 to +315 +60 to +360	-13 to -35 -17 to -46	31 36	8DP4
Medium Cap	D	7000	2000	300	-125	—	—	—	7000	250	1190 to 1790	-15 to -55	None	9AP4 ^x
Ratings and typical operating conditions are same as for type 10BP4-A.													10BP4	
Cavity Cap	A	12000	—	410	-125	410	150	150	8000 to 12000	250	—	-22 to -58	—	10BP4-A
Cavity Cap	A	12000	—	410	-125	410	140	140	8000 to 12000	250	—	-22 to -58	None	10FP4-A
Medium Cap	D	7000	2000	300	-125	—	—	—	7000	250	1190 to 1790	-15 to -55	None	12AP4 ^x
Cavity Cap	A	12000	—	410	-125	410	140	140	9000 to 12000	250	—	-22 to -58	None	12KP4-A
Ratings and typical operating conditions are same as for type 12LP4-A.													12LP4	
Cavity Cap	A	12000	—	410	-125	410	150	150	9000 to 12000	250	—	-22 to -58	—	12LP4-A
Cavity Cap	H	14000	+1000 -500	500	-140	—	180	180	10000 14000	300 400	0 to +400 0 to +400	-25 to -69 -31 to -90	None	14ATP4 ⁺
See 14EP4/14CP4/14BP4.													14BP4	
See 14EP4/14CP4/14BP4.													14CP4	
See 14EP4/14CP4/14BP4.													14EP4	

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)











Type	Envelope	Aluminized Screen	Faceplate	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches				Neck Length inches	Minimum Screen Size inches
				Min. rad	Max. rad			Htg	Hot	Vert	Overall Length	Envelope Dia. w/ Shroud	Width	Height		
Black-and-White Types (Cont'd)																
14EP4/ 14CP4/ 14BP4	G	No	FG	2000	750	M	M	70	65	50	16 $\frac{1}{2}$	13 $\frac{1}{2}$	12 $\frac{3}{4}$	9 $\frac{3}{4}$	7 $\frac{1}{2}$	11 $\frac{1}{2}$ x 8 $\frac{1}{2}$
14HP4	G	No	FG	2000	750	E	M	70	65	50	17 $\frac{1}{2}$	13 $\frac{1}{2}$	12 $\frac{3}{4}$	9 $\frac{3}{4}$	7 $\frac{1}{2}$	11 $\frac{1}{2}$ x 8 $\frac{1}{2}$
14QP4-A	G	Yes	FG	1800	600	E	M	70	65	50	16 $\frac{1}{2}$	13 $\frac{1}{2}$	12 $\frac{3}{4}$	9 $\frac{3}{4}$	6 $\frac{1}{2}$	11 $\frac{1}{2}$ x 8 $\frac{1}{2}$
14RP4	G	No	Same as 14RP4-A, except has non-aluminized screen.													
14RP4-A	G	Yes	FG	1200	800	E	M	90	85	68	14 $\frac{1}{2}$	14 $\frac{1}{2}$	13 $\frac{1}{2}$	10 $\frac{1}{2}$	6 $\frac{1}{2}$	12 $\frac{1}{2}$ x 9 $\frac{1}{2}$
14WP4	See 14WP4/14ZP4.															
14WP4/ 14ZP4	G	Yes	FG	1200	800	E	M	90	85	68	13 $\frac{1}{2}$	14 $\frac{1}{2}$	13 $\frac{1}{2}$	10 $\frac{1}{2}$	5 $\frac{1}{2}$	12 $\frac{1}{2}$ x 9 $\frac{1}{2}$
14ZP4	See 14WP4/14ZP4.															
16AP4	M	No	Same as 16AP4-A, except has clear glass faceplate.													
16AP4-A	M	No	FG	None	None	M	M	—	53	—	22 $\frac{1}{2}$	16	—	—	7 $\frac{1}{2}$	14 $\frac{1}{2}$ Dia.
16DP4-A	G	No	FG	None	None	M	M	—	60	—	21	16	—	—	7 $\frac{1}{2}$	14 $\frac{1}{2}$ Dia.
16GP4	M	No	Same as 16GP4-B, except has Filterglass faceplate.													
16GP4-A	M	No	Same as 16GP4-B, except has clear glass faceplate.													
16GP4-B	M	No	FPG	None	None	M	M	—	70	—	17 $\frac{1}{2}$	16	—	—	6 $\frac{1}{2}$	14 $\frac{1}{2}$ Dia.
16GP4-C	M	No	Same as 16GP4-B, except has frosted clear glass faceplate.													

Data for these types continued on next page.


Data for these types continued from preceding page.

High Voltage Terminal	Rating	Maximum Ratings							Typical Operating Conditions in Gold-Shell Service					P M Ins-Trip Magnet Min. Current	Type
		Peak High Voltage (Wave) Vrms	Fusing Element Vrms	Grid-No. 2 Vrms	Grid-No. 1 Vrms	Peak Heater-Cathode Vrms			Peak High Voltage Element (Wave) Vrms	Grid-No. 2 Vrms	Fusing Element Vrms	Grid-No. 1 Vrms For Visual Cathode of Forward Anode			
						W(-)		W(+)							
						Starting Wave-Up	After Warm-Up								
Black-and-White Types (Cont'd)															
Cavity Cap	A	14000	—	410	-125	410	150	150	12000 14000	300 300	— —	-28 to -72 -28 to -72	29 31	14EP4/ 14CP4/ 14BP4	
Cavity Cap	H	14000	+500 -500	500	-125	410	180	180	12000 14000	300 300	-50 to +265 -55 to +310	-28 to -72 -28 to -72	29 31	14HP4	
Cavity Cap	H	11000	+1000 -500	500	-180	410	180	180	10000	300	-15 to +285	-29 to -77	29	14QP4-A	
Ratings and typical operating conditions are same as for type 14RP4-A.															
Cavity Cap	H	14000	+500 -500	400	-110	—	180	180	10000 14000	300 300	-50 to +350 +70 to +478	-26 to -70 -26 to -70	36 43	14RP4 14RP4-A	
See 14WP4/14ZP4.															
Cavity Cap	H	14000	+1000 -500	500	-140	410	180	180	12000	300	0 to +250	-28 to -72	None	14WP4 14WP4/ 14ZP4	
See 14WP4/14ZP4.															
Ratings and typical operating conditions are same as for type 16AP4-A.															
Metal-Shell Lip	F	14000	—	410	-125	410	150	150	9000 12000	300 300	— —	-28 to -72 -28 to -72	25 29	16AP4-A	
Cavity Cap	F	15000	—	410	-125	410	125	125	9000 to 15000	250	—	-22 to -58	—	16DP4-A	
Ratings and typical operating conditions are same as for type 16GP4-B.															
Ratings and typical operating conditions are same as for type 16GP4-B.															
Metal-Shell Lip	F	14000	—	410	-125	410	150	150	12000	300	—	-28 to -72	29	16GP4-B	
Ratings and typical operating conditions are same as for type 16GP4-B.															
Ratings and typical operating conditions are same as for type 16GP4-B.															

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

 Type	Envelope	Aluminized Screen	Flangeless	External Conductive Cooling		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches			Neck Length Inches	Minimum Screen Size Inches	
				Sta. Cool	Sta. Cool			Htg.	Hor.	Vert.	Overall Length	Envelope Dia. or Diameter	Width			Height
* Black-and-White Types (Cont'd)																
16KP4	See 16RP4/16KP4.															
16KP4-A	See 16RP4-A/16KP4-A.															
16LP4-A		No	PG	2000	750	M	M	—	52	—	20 $\frac{1}{2}$	16	—	—	7 $\frac{1}{2}$	14 $\frac{1}{2}$ Dia.
16RP4	See 16RP4/16KP4.															
16RP4/16KP4		No	Same as 16RP4-A/16KP4-A, except has non-aluminized screen.													
16RP4-A	See 16RP4-A/16KP4-A.															
16RP4-A/16KP4-A		Yes	PG	1500	750	M	M	70	65	50	19 $\frac{1}{2}$	16 $\frac{1}{2}$	14 $\frac{1}{2}$	11 $\frac{1}{2}$	7 $\frac{1}{2}$	13 $\frac{1}{2}$ x 10 $\frac{1}{2}$
16TP4		No	PG	2000	*750	M	M	70	65	50	18 $\frac{1}{2}$	16 $\frac{1}{2}$	14 $\frac{1}{2}$	11 $\frac{1}{2}$	6 $\frac{1}{2}$	13 $\frac{1}{2}$ x 10 $\frac{1}{2}$
16WP4-A		No	PG	1500	750	M	M	—	.70	—	18 $\frac{1}{2}$	16	—	—	7 $\frac{1}{2}$	14 $\frac{1}{2}$ Dia.
17ATP4	See 17AVP4/17ATP4.															
17ATP4-A	See 17AVP4-A/17ATP4-A.															
17AVP4	See 17AVP4/17ATP4.															
17AVP4/17ATP4		No	Same as 17AVP4-A/17ATP4-A, except has non-aluminized screen.													
17AVP4-A	See 17AVP4-A/17ATP4-A.															
17AVP4-A/17ATP4-A		Yes	PG	1500	1000	E	M	90	85	68	16	16 $\frac{1}{2}$	15 $\frac{1}{2}$	12 $\frac{1}{2}$	6 $\frac{1}{2}$	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$
17BJP4		Yes	PG	1500	1000	E	M	90	85	68	15	16 $\frac{1}{2}$	15 $\frac{1}{2}$	12 $\frac{1}{2}$	5 $\frac{1}{2}$	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$
17BP4-A		No	Same as 17BP4-B, except has non-aluminized screen.													

Data for these types continued on next page.

High Voltage Terminal	Sealing	Maximum Ratings							Typical Operating Conditions in Gold-Silver Service					P M See Top Diagram MIL-COMM	 Type
		Flat High-Voltage Electrode (Wire ⁺) Volts	Fencing Electrode Volts	Grid No. 2 Volts	Grid No. 1 Volts	Peak Heater Cathode Volts			Flat High-Voltage Electrode (Wire ⁺) Volts	Grid No. 2 Volts	Fencing Electrode Volts	Grid No. 1 Volts Per Volt Estimate of Forward Ratio			
						H(-)		H(+)							
						During Warm-Up	After Warm-Up								
Mock-and-White Types (Cont'd)															
See 16RP4/16KP4.													16KP4		
See 16RP4-A/16KP4-A.													16KP4-A		
Cavity Cap	A	14000	—	410	-125	410	125	125	12000 to 14000	300	—	-28 to -72	—	16LP4-A	
See 16RP4/16KP4.													16RP4		
Ratings and typical operating conditions are same as for type 16RP4-A/16KP4-A.													16RP4/ 16KP4		
See 16RP4-A/16KP4-A.													16RP4-A		
Cavity Cap	A	16000	—	410	-125	410	150	150	12000 14000	300 300	—	-28 to -72 -28 to -72	29 31	16RP4-A/ 16KP4-A	
Cavity Cap	A	14000	—	410	-125	410	150	150	12000 14000	300 300	—	-28 to -72 -28 to -72	29 31	16TP4	
Cavity Cap	A	16000	—	410	-125	410	125	125	12000 to 16000	250	—	-22 to -56	—	16WP4-A	
See 17AVP4/17ATP4.													17ATP4		
See 17AVP4-A/17ATP4-A.													17ATP4-A		
See 17AVP4/17ATP4.													17AVP4		
Ratings and typical operating conditions are same as for type 17AVP4-A/17ATP4-A.													17AVP4/ 17ATP4		
See 17AVP4-A/17ATP4-A.													17AVP4-A		
Cavity Cap	H	16000	+1000 -500*	500	-140	410	180	180	14000 16000	300 300	-35 to +310 -65 to +350	-28 to -72 -28 to -72	31 33	17AVP4-A/ 17ATP4-A	
Cavity Cap	H	16000	+1000 -500	500	-140	410	180	180	16000	300	-65 to +350	-28 to -72	None	17BJP4	
Ratings and typical operating conditions are same as for type 17BP4-B.													17BP4-A		

Data for these types continued from preceding page.

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

Type	Envelope	Minimized Screen	Facinplate	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches			Neck Length Inches	Minimum Screen Size Inches	
				Min. rad	Max. rad			Mag.	Vert.	Horiz.	Overall Length	Envelope Dia. or Diameter	Width			Height
Black-and-White Types (Cont'd)																
17BP4-B	G	Yes	FG	1500	750	M	M	70	65	50	10 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	7 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17BRP4				See 17BP4/17CAP4/17CKP4/17BRP4.												
17BVP4	G	Yes	FG	1500	1000	E	M	110	105	87	13 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	13 $\frac{1}{2}$ _±	6 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17BZP4				See 17BP4/17CAP4/17CKP4/17BRP4.												
17BZP4 17CAP4 17CKP4 17BRP4	G	Yes	FG	1500	1000	E	M	110	105	87	12 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	13 $\frac{1}{2}$ _±	5 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17CAP4				See 17BP4/17CAP4/17CKP4/17BRP4.												
17CP4	G	Yes	FG	1500	1000	E	M	110	105	87	12 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	5 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17CFP4	G	Yes	FG	1500	1200	E	M	90	85	68	15 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	5 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17CKP4	G	Yes	FG	1500	1000	E	M	110	105	87	12 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	5 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17CP4	M	No	FFG	None	None	M	M	70	66	50	19	17	16 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	7 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 10 $\frac{1}{2}$ _±
17CP4-A	I	No		Same as 17CP4, except has Filterglass facinplate.												
17CYP4	G	Yes	FG	1800	1000	E	M	90	88	88	14 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	4 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17DOP4	G	Yes	FG	1500	1000	E	M	110	105	87	10 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	3 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±
17DRP4	G	Yes	FG	1500	1000	E	M	110	108	87	11 $\frac{1}{2}$ _±	16 $\frac{1}{2}$ _±	12 $\frac{1}{2}$ _±	15 $\frac{1}{2}$ _±	4 $\frac{1}{2}$ _±	14 $\frac{1}{2}$ x 11 $\frac{1}{2}$ _±

Data for these types continued on next page.

High Voltage Terminal	Maximum Ratings					Typical Operating Conditions in Cold-Dry Service					P.M. 100-110 Volts Integrated M.C. Outputs	Type	
	Cap. Int.	Fwd. Imp. Voltage (RMS) Volts	Fwding. Current (RMS) Volts	Grid No. 1 Volts	Grid No. 2 Volts	Peak Screen Grid Volts	Peak Main Control Grid Volts	Fwd. Imp. Voltage (RMS) Volts	Grid No. 2 Volts	Fwding. Current (RMS) Volts			Grid No. 1 Volts For Voids at Full Load of Forward Bias
Cavity Cap A	16000	—	500	-140	410	150	150	12000	300	—	-28 to -72	29	17BP4-B
Cavity Cap L	16000	+1000 -500	500	-140	410	180	180	14000	300	-50 to +250	-28 to -72	31	17BRP4
Cavity Cap K	16000	+1000 -500	500	-140	—	180	180	14000	300 400	0 to +400 0 to +400	-28 to -72	None	17BVP4 17BZP4/ 17CAP4/ 17CKP4/ 17BRP4
Cavity Cap H	16000	+1000 -500	500	-140	410	180	180	14000	300	0 to +400 -50 to +250	-28 to -72	None	17CAP4 17CP4
Cavity Cap K	15000	+1000 -500	500	-140	410	180	180	14000	300	0 to +500	-28 to -72	None	17CKP4
Metal-Shell Lip	16000	—	410	-125	410	180	180	12000 14000	300 300	—	-28 to -72	29 31	17CP4
Cavity Cap H	16000	+1000 -500	500	-140	410	180	180	14000	450	-30 to +350	-39 to -105	None	17CP4-A
Cavity Cap E	16000	650	550	-140	410	180	180	16000	400	0 to +400	-34 to -63	None	17CP4
Cavity Cap K	16000	+1000 -500	500	-140	—	180	180	14000	400	0 to +400	-43 to -78	None	17DKP4
Cavity Cap K	16000	+1000 -500	500	-140	—	180	180	14000	400	0 to +400	-45 to -90	None	17OSP4

Ratings and typical operating conditions are same as for type 17CP4.

Data for these types continued from preceding page.

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

Type	Envelope Screen	Anodes Screen	Focusing	External Control		Focusing Method	Deflection Method	Mag. Ratio	Linearity	Linearity Error %	Linearity Error	Minimum Resolutions				Horizontal Length Index	Vertical Length Index	Minimum Screen Size Index
				Control	Conductance							Agility	Resolution Angle	Resolution	Line or Spot			

Black-and-White Types (Cont'd)


17QP4	No	PFO	None	None	E	M	70	65	50	10%	17	16%	12½%	7½	14½ × 10½%		
17HP4/17RP4	No	PQ	1500	750	E	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 10½%		
17HP4-B/17RP4-C	Yes	PQ	1500	750	E	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 11½		
17P4	No	PQ	750	500	M	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 11½		
17P4/17P4	No	PQ	1500	750	E	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 10½%		
17P4-A/17P4-B	Yes	PQ	1500	750	E	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 10½%		
17QP4	No	PQ	1500	750	M	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 10½%		
17QP4-A	Yes	PQ	1500	1500	M	M	70	65	50	10%	16½	15%	12½%	7½	14½ × 10½%		
17RP4																	
17RP4-C																	
17P4																	
17P4																	
17P4-B																	
19P4	No																
19P4-A	No																

Same as 19A74-B, except has clear glass faceplate.

Same as 19A74-B, except has fluorescent faceplate.

Data for these types continued on next page.

Data for these types continued from preceding page.


High Voltage Terminal	Size	Maximum Ratings							Typical Operating Conditions in Gold-Strip Service					P M See-Trap Magnet Min. Current	 Type
		Peak High Voltage (Vlt ⁺) Vals	Fusing Current Vals	Std. No. 2 Vals	Std. No. 1 Vals	Post Heater Cathode Vals			Peak High-voltage Cathode (Vlt ⁺) Vals	Std. No. 2 Vals	Fusing Current Vals	Std. No. 1 Vals For Visual Disturbance at Panned Beams			
						Hot (-)	Hot (-)	Hot (+)							
Metal-Shell Lip	G	16000	5000	500	-125	410	180	180	12000 14000	300 300	2040 to 2760	-28 to -72 -28 to -72	29 31	17QP4	
Cavity Cap	H	16000	+1000 -500*	500	-140	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	17HP4/ 17RP4	
Cavity Cap	H	16000	+1000 -500*	500	-140	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	17HP4-B/ 17RP4-C	
Cavity Cap	A	18000	---	400	-140	410	150	150	14000 16000	300 300	---	-28 to -72 -28 to -72	31 33	17JP4	
Cavity Cap	H	16000	+1000 -500*	500	-140	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	17LP4/ 17VP4	
Cavity Cap	H	16000	+1000 -500*	500	-140	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	17LP4-A/ 17VP4-B	
Cavity Cap	A	16000	---	410	-125	410	150	150	12000 14000	300 300	---	-28 to -72 -28 to -72	29 31	17QP4	
Cavity Cap	A	18000	---	500	-125	410	150	150	12000 14000	300 300	---	-28 to -72 -28 to -72	29 31	17QP4-A	
See 17HP4 17RP4.												17RP4			
See 17HP4-B 17RP4-C.												17RP4-C			
Metal-Shell Lip	G	16000	+1000 -500*	500	-125	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	17TP4	
See 17LP4 17VP4.												17VP4			
See 17LP4-A, 17VP4-B.												17VP4-B			
Ratings and typical operating conditions are same as for type 19AP4-B.												19AP4			
Ratings and typical operating conditions are same as for type 19AP4-B.												19AP4-A			

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

Type	Envelope	Minimized Screen	Facings	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Minimum Dimensions Inches			Neck Length Inches	Minimum Screen Size Inches	
				Max. coat	Min. coat			Horiz.	Vert.	Vert.	Overall Length	Envelope Dia. or Diameter	Width			Height
Black-and-White Types (Cont'd)																
19AP4-B	Ⓜ	No	FFG	None	None	M	M	—	66	—	22	18 $\frac{1}{4}$	—	—	7 $\frac{1}{2}$	17 $\frac{1}{2}$ Dia.
19AP4-D	Ⓜ	No														
Same as 19AP4-B, except has frosted clear glass facings.																
20CP4	Ⓜ	No	FG	None	None	M	M	70	66	50	21 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 x 12 $\frac{1}{2}$
20CP4-A																
See 20DP4-A/20CP4-A.																
20CP4-D																
See 20DP4-C/20CP4-D.																
20DP4-A																
See 20DP4-A/20CP4-A.																
20DP4-A/ 20CP4-A	Ⓜ	No	FG	1500	500	M	M	70	66	50	21 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 x 12 $\frac{1}{2}$
20DP4-C																
See 20DP4-C/20CP4-D.																
20DP4-C/ 20CP4-D	Ⓜ	Yes	FG	1500	500	M	M	70	66	50	21 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 x 12 $\frac{1}{2}$
20HP4-A																
See 20HP4-A/20MP4.																
20HP4-A/ 20MP4	Ⓜ	No	FG	1500	500	E	M	70	66	50	22 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 x 12 $\frac{1}{2}$
20HP4-D	Ⓜ	Yes	FG	1500	500	E	M	70	66	50	22 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 x 12 $\frac{1}{2}$
20MP4																
See 20HP4-A/20MP4.																
21ACP4-A																
See 21ACP4-A/21BSP4/21AMP4-A.																
21ACP4-A/ 21BSP4/ 21AMP4-A	Ⓜ	Yes	FG	2500	2000	M	M	90	85	68	20 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$

Data for these types continued on next page.

Data for these types continued from preceding page.

High Voltage Terminal	Sealing	Maximum Ratings						Typical Operating Conditions in Cold-Drive Service					P M Ion-Trap Magnet Min. Counts	 Type
		Fluor High Voltage Electrode (500V) Vols	Plasma Electrode Vols	Grid No. 2 Vols	Grid No. 1 Vols (Post-Matrix-Cathode Vols			Fluor High Voltage Electrode (500V) Vols	Grid No. 2 Vols	Focusing Electrode Vols	Grid No. 1 Vols For Slow Collection of Positron Matter		
						Hi(-)	Blank Wire-Up	After Wire-Up						
Black-and-White Types (Cont'd)														
Metal-Shell Lip	F	16000	--	410	-125	410	150	150	12000 14000	300 300	--	-28 to -72 -28 to -72	29 31	19AP4-B
Ratings and typical operating conditions are same as for type 19AP4-B.														
Cavity Cap	F	18000	--	410	-125	410	150	150	14000 16000	300 300	--	-28 to -72 -28 to -72	31 33	19AP4-D 20CP4
See 20DP4-A 20CP4-A.														
See 20DP4-C, 20CP4-D.														
See 20DP4-A 20CP4-A.														
Cavity Cap	A	18000	--	410	-125	410	180	180	14000 16000	300 300	--	-28 to -72 -28 to -72	31 33	20CP4-A 20CP4-D 20DP4-A 20DP4-A/20CP4-A
See 20DP4-C 20CP4-D.														
Cavity Cap	A	18000	--	410	-125	410	180	180	14000 16000	300 300	--	-28 to -72 -28 to -72	31 33	20DP4-C 20DP4-C/20CP4-D
See 20HP4-A, 20MP4.														
Cavity Cap	H	16000	+1000 -500*	500	-125	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	20HP4-A/20MP4
Cavity Cap	H	16000	+1000 -500*	500	-125	410	180	180	14000 16000	300 300	-55 to +300 -65 to +350	-28 to -72 -28 to -72	31 33	20HP4-D
See 20HP4-A/20MP4.														
See 21ACP4-A/21BSP4/21AMP4-A.														
Cavity Cap	A	20000	--	500	-140	410	180	180	16000 18000	300 400	--	-28 to -72 -37 to -96	33 35	20MP4 21ACP4-A 21ACP4-A/21BSP4/21AMP4-A

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)


Type	Envelope	Aluminized Screen	Faceplate	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches			Heel Length Inset	Minimum Screen Size Inset	
				Hor. and	Ver. and			Top	Side	Bottom	Overall Length	Envelope Dia. or Diameter	Width			Height
Black-and-White Types (Cont'd)																
21ALP4	Ⓜ	No	FG	750	500	E	M	90	85	60	20 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21ALP4-A	See 21ALP4-B 21ALP4-A															
21ALP4-B	See 21ALP4-B 21ALP4-A															
21ALP4-B/ 21ALP4-A	Ⓜ	Yes	FG	750	500	E	M	90	85	60	20 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21AMP4-A	See 21ACP4-A 21BSP4 21AMP4-A															
21AP4	Ⓜ	No	FPG	None	None	M	M	70	66	50	22 $\frac{1}{2}$	21	19 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	18 $\frac{1}{2}$ x 13 $\frac{1}{2}$
21ATP4	See 21ATP4-A 21ATP4															
21ATP4-A	See 21ATP4-A, 21ATP4															
21ATP4-A/ 21ATP4	Ⓜ	Yes	FG	1200	1200	E	M	90	85	60	20 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21AUP4	See 21AVP4 21AUP4															
21AUP4-A	See 21AVP4-B/21AUP4-B 21AVP4-A 21AUP4-A															
21AUP4-B	See 21AVP4-B 21AUP4-B 21AVP4-A/21AUP4-A															
21AVP4	See 21AVP4/21AUP4															
21AVP4/ 21AUP4	Ⓜ	No	FG	2500	2000	E	M	72	67	53	22 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21AVP4-A	See 21AVP4-B/21AUP4-B/21AVP4-A 21AUP4-A															
21AVP4-B	See 21AVP4-B, 21AUP4-B 21AVP4-A/21AUP4-A															
21AVP4-B/ 21AUP4-B/ 21AVP4-A/ 21AUP4-A	Ⓜ	Yes	FG	2500	2000	E	M	72	67	53	22 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$

Data for these types continued on next page.


High Voltage Terminal	Rating	Minimum Ratings							Typical Operating Conditions to Gold-Beze Service					P in Ion-Trap (Against Min. Current)	Type
		Flat High Voltage (Surface) (0 to +) Volts	Fencing Electrode Volts	Grid No. 2 Volts	Grid No. 1 Volts	Pent. Heater Cathode Volts		Flat High Voltage Cathode (0 to +) Volts	Grid No. 2 Volts	Fencing Electrode Volts	Grid No. 1 Volts For Wood Cathode or Support Heater				
						B(-)	A(+)								
					B(-)	A(+)									
Black-and-White Types (Cont'd)															
Cavity Cap	H	18000	All other ratings and typical operating conditions are same as for type 21ALP4-B/21ALP4-A.										33	21ALP4	
See 21ALP4-B 21ALP4-A														21ALP4-A	
See 21ALP4-B 21ALP4-A														21ALP4-B	
Cavity Cap	H	20000	+1000 -500*	500	-140	410	180	180	16000 18000	300 400	-65 to +350 -75 to +400	-28 to -72 -37 to -96	33 35	21ALP4-B/ 21ALP4-A	
See 21ACP4-A 21BSP4/21AMP4-A.														21AMP4-A	
Metal-Shell Lip	F	18000	—	500	-125	410	180	180	14000 16000	300 300	—	-28 to -72 -28 to -72	31 33	21AP4	
See 21ATP4-A 21ATP4.														21ATP4	
See 21ATP4-A 21ATP4.														21ATP4-A	
Ratings and typical operating conditions are same as for type 21ALP4-B/21ALP4-A.														21ATP4-A/ 21ATP4	
See 21AVP4/21AUP4.														21AUP4	
See 21AVP4-B/21AUP4-B 21AVP4-A 21AUP4-A.														21AUP4-A	
See 21AVP4-B/21AUP4-B 21AVP4-A 21AUP4-A.														21AUP4-B	
See 21AVP4/21AUP4.														21AVP4	
Cavity Cap	H	18000	+1000 -500*	500	-140	410	180	180	16000 18000	300 400	-65 to +350 -75 to +400	-28 to -72 -37 to -96	33 35	21AVP4/ 21AUP4	
See 21AVP4-B 21AUP4-B 21AVP4-A 21AUP4-A.														21AUP4-A	
See 21AVP4-B, 21AUP4-B 21AVP4-A 21AUP4-A.														21AVP4-B	
Cavity Cap	H	20000	+1000 -500*	500	-140	410	180	180	16000 18000	300 400	-65 to +350 -75 to +400	-28 to -72 -37 to -96	33 35	21AVP4-B/ 21AUP4-B/ 21AVP4-A/ 21AUP4-A	

Data for these types continued from preceding page.
















RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

 Type	Envelope	Mounted Screen	Facilities	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Mounting Dimensions Inches			Neck Length Inches	Minimum Screen Size Inches	
				Min. μ in.	Max. μ in.			Top	Side	Vert.	Overall Length	Envelope Dia. or Diameter	Width			Height
Black-and-White Types (Cont'd)																
21AWP4	ⓐ	Yes	FG	2500	2000	M	M	72	67	53	23 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21BSP4	See 21ACP4-A/21BMP4/21AMP4-A.															
21BTP4	ⓐ	Yes	FG	2500	2000	E	M	90	85	68	20 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21CBP4-A	ⓐ	Yes	FG	2500	2000	E	M	90	85	68	18 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21CEP4	ⓐ	Yes	FG	2500	2000	E	M	110	105	87	14 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21CXP4	ⓐ	Yes	FG	2500	2000	E	M	90	85	68	18 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21CZP4	See 21DEP4-A/21DEP4/21CZP4.															
21DAP4	ⓐ	Yes	FG	2500	2000	E	M	110	105	87	15	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21DEP4	See 21DEP4-A/21DEP4/21CZP4.															
21DEP4-A	See 21DEP4-A/21DEP4/21CZP4.															
21DEP4-A/ 21DEP4/ 21CZP4	ⓐ	Yes	FG	2500	2000	E	M	110	105	87	15	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21DFP4	ⓐ	Yes	FG	2500	1700	E	M	110	105	87	14 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21DLP4	ⓐ	Yes	FG	2500	2000	E	M	90	85	68	17 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	4 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21DSP4	ⓐ	Yes	FG	2500	2000	E	M	90	85	68	18 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	5 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$

Data for these types continued from preceding page.

High Voltage Terminal	Type	Maximum Ratings							Typical Operating Conditions in Gold-Drive Service					P in In-Trap Signal Min. Current	 Type
		Flwd High Voltage Elements (Wtr ⁺) Vols	Forward Elements Vols	Gnd. No. 2 Vols	Gnd. No. 1 Vols	Push Motor-Cathode Vols		Flwd High Voltage Elements (Wtr ⁺) Vols	Gnd. No. 2 Vols	Forward Elements Vols	Gnd. No. 1 Vols For Worst Case/Union of Forward Motor				
						H(-) Driving Wave-By ⁺	H(+) Idle Wave-By								
Black-and-White Types (Cont'd)															
Cavity Cap	A	18000	—	500	-140	410	180	180	16000 18000	300 400	—	-28 to -72 -37 to -96	33 35	21AWP4	
See 21ACP4-A 21BSP4 21AMP4-A.															
Ratings and typical operating conditions are same as for type 21ALP4-B/21ALP4-A.															
Cavity Cap	H	20000	+1000 -500	500	-140	410	180	180	16000	300	0 to +450	-28 to -72	None	21CBP4-A	
Cavity Cap	K	18000	+1000 -500	500	-140	—	180	180	14000 16000	300 400	0 to +400 0 to +400	-28 to -72 -36 to -94	None	21CEP4	
Cavity Cap	H	20000 [⊕]	+1000 [⊕] -500 [⊕]	64 [⊕]	+140 [⊕]	410	180	180	18000 [⊕]	50 [⊕]	0 to +350 [⊕]	+32 to +47 [⊕]	None	21CXP4	
See 21DEP4-A/21DEP4/21CZP4.															
Cavity Cap	K	18000	+1000 -500	500	-140	410	180	180	16000	400	0 to +400	-36 to -94	None	21DAP4	
See 21DEP4-A/21DEP4/21CZP4.															
See 21DEP4-A/21DEP4/21CZP4.															
Cavity Cap	K	20000	+1000 -500	500	-140	410	180	180	16000	400	0 to +500	-36 to -94	None	21DEP4-A/ 21DEP4/ 21CZP4	
Cavity Cap	K	18000	+1000 -500	500	-140	—	180	180	14000 16000	300 400	0 to +400 0 to +400	-28 to -72 -36 to -94	None	21DFP4	
Cavity Cap	H	20000	+1000 -500	500	-140	410	180	180	16000	300	0 to +400	-28 to -72	None	21DLP4	
Cavity Cap	H	20000 [⊕]	+1000 [⊕] -500 [⊕]	64 [⊕]	+140 [⊕]	410	180	180	16000 [⊕]	50 [⊕]	0 to +400 [⊕]	+32 to +47 [⊕]	None	21DSP4	

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

 Type	Envelope	Aluminized Screen	Formplate	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches			Neck Length inches	Minimum Screen Size inches	
				Max. mil	Min. mil			Htg.	Vert.	Horiz.	Envelope Dia. or Diameter	Web	Height			
Black-and-White Types (Cont'd)																
21EP4		No	Same as 21EP4-A, except has no external conductive coating.													
21EP4-A		No	Same as 21EP4-B, except has non-aluminized screen.													
21EP4-B		Yes	FG**	750	500	M	M	70	65	50	23 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 13 $\frac{1}{2}$
21EQP4		Yes	PG	2500	2000	E	M	110	105	87	12 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	3 $\frac{1}{2}$	19 $\frac{1}{2}$ x 15 $\frac{1}{2}$
21FP4-A		No	Same as 21FP4-C, except has non-aluminized screen.													
21FP4-C		Yes	FG**	750	500	E	M	70	65	50	23 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 13 $\frac{1}{2}$
21MP4		No	FFG	None	None	E	M	70	66	50	23 $\frac{1}{2}$	21	19 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	18 $\frac{1}{2}$ x 13 $\frac{1}{2}$
21WP4		No	Same as 21WP4-A, except has non-aluminized screen.													
21WP4-A		Yes	PG	750	500	M	M	70	66	50	22 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 $\frac{1}{2}$ x 13 $\frac{1}{2}$
21XP4-A		Yes	PG	2500	2000	E	M	70	66	50	22 $\frac{1}{2}$	20 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	17 $\frac{1}{2}$ x 13 $\frac{1}{2}$
21YP4		No	Same as 21YP4-A, except has non-aluminized screen.													
21YP4-A		Yes	PG	750	500	E	M	70	65	50	23 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 14 $\frac{1}{2}$
21ZP4-A		No	Same as 21ZP4-B, except has non-aluminized screen.													
21ZP4-B		Yes	PG	750	500	M	M	70	65	50	23 $\frac{1}{2}$	21 $\frac{1}{2}$	20 $\frac{1}{2}$	15 $\frac{1}{2}$	7 $\frac{1}{2}$	19 $\frac{1}{2}$ x 14 $\frac{1}{2}$
24ADP4	See 24ADP4, 24VP4-A, 24CP4-A/24TP4.															


Data for these types continued on next page.

High Voltage Terminal	Business Ratings						Typical Operating Conditions in Cold-Dry Service				P.M. Inter-Trip Reclosed MILS. (Quiescent)	Type		
	Dist. Ins. (ft.)	Peak High Voltage (kV) (100%)	Fusing Element (kV)	Dist. No. 1 (ft.)	Peak Make Capacity (kA)			Peak High Voltage (kV) (100%)	Dist. No. 2 (ft.)	Fusing Element (kV)			Dist. No. 1 (ft.) For Total Calculation of Fused Ratio	
					Break (100-30%)	Make (100%)	Short-Circuit (100%)							
Black-and-White Types (Cont'd)														
Cavity Cap	P	Ratings and typical operating conditions are same as for type 21EP4-B.										21EP4		
Ratings and typical operating conditions are same as for type 21EP4-B.														
Cavity Cap	A	18000	—	500	-125	410	180	180	14000	300	—	-28 to -72	31	21EP4-A
									16000	300	—	-28 to -72	33	21EP4-B
Cavity Cap	B	18000	650	550	-140	410	180	180	16000	400	0 to +400	-34 to -63	None	21EQP4
									18000	500	0 to +400	-43 to -76		21EP4-A
Ratings and typical operating conditions are same as for type 21FP4-C.														
Cavity Cap	H	18000	+1000 -500	500	-125	410	180	180	14000	300	-55 to +300	-28 to -72	31	21FP4-C
									16000	300	-65 to +350	-28 to -72	33	21MP4
Metal-Shell Lap	O	16000	+1000 -500	500	-125	410	180	180	14000	300	-55 to +300	-28 to -72	31	21MP4
									16000	300	-65 to +350	-28 to -72	33	21WP4
Ratings and typical operating conditions are same as for type 21WP4-A.														
Cavity Cap	A	18000	—	500	-125	410	180	180	16000	300	—	-28 to -72	33	21WP4-A
									18000	300	—	-28 to -72	35	21XP4-A
Cavity Cap	H	18000	+1000 -500	500	-125	410	180	180	16000	300	-65 to +350	-28 to -72	33	21YP4
									18000	300	-70 to +395	-28 to -72	35	21YP4-A
Ratings and typical operating conditions are same as for type 21YP4-A.														
Cavity Cap	H	18000	+1000 -500	500	-140	410	180	180	16000	300	-65 to +350	-28 to -72	33	21YP4-A
									18000	400	-75 to +400	-37 to -96	35	21ZP4-A
Ratings and typical operating conditions are same as for type 21ZP4-B.														
Cavity Cap	A	18000	—	500	-140	410	180	180	16000	300	—	-28 to -72	33	21ZP4-B
									18000	300	—	-28 to -72	35	24ADP4

See 24ADP4/24VP4-A/24CP4-A/24TP4.


Data for these types continued from preceding page.

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

 Type	Envelope	Aluminized Screen	Faceplate	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches			Neck Length Inches	Minimum Screen Size Inches	
				Max	Min			Diag	Horiz	Vert	Overall Length	Envelope Dia. or Diagonal	Width			Height
Black-and-White Types (Cont'd)																
24ADP4/ 24VP4-A/ 24CP4-A/ 24TP4	G	Yes	FG	2500	2000	M	M	90	85	68	21 ¹ / ₂	24 ¹ / ₂	22 ¹ / ₂	18 ¹ / ₂	7 ¹ / ₂	21 ¹ / ₂ x 16 ¹ / ₂
24AEP4	G	Yes	FG	2500	2000	E	M	90	85	68	19 ¹ / ₂	24 ¹ / ₂	22 ¹ / ₂	18 ¹ / ₂	5 ¹ / ₂	21 ¹ / ₂ x 16 ¹ / ₂
24AHP4	G	Yes	FG	2500	2000	E	M	110	105	87	16 ¹ / ₂	24 ¹ / ₂	22 ¹ / ₂	18 ¹ / ₂	5 ¹ / ₂	21 ¹ / ₂ x 16 ¹ / ₂
24AUP4	G	Yes	FG	2500	1700	E	M	90	85	68	18 ¹ / ₂	24 ¹ / ₂	22 ¹ / ₂	18 ¹ / ₂	4 ¹ / ₂	21 ¹ / ₂ x 16 ¹ / ₂
24BAP4	G	Yes	FG	2500	2000	E	M	110	105	87	16 ¹ / ₂	24 ¹ / ₂	22 ¹ / ₂	18 ¹ / ₂	5 ¹ / ₂	21 ¹ / ₂ x 16 ¹ / ₂
24CP4-A	See 24ADP4 24VP4 A 24CP4-A 24TP4.															
24DP4-A/ 24YP4	G	Yes	FG	2500	2000	E	M	90	85	68	21 ¹ / ₂	24 ¹ / ₂	22 ¹ / ₂	18 ¹ / ₂	7 ¹ / ₂	21 ¹ / ₂ x 16 ¹ / ₂
24TP4	See 24ADP4 24VP4 A 24CP4-A 24TP4.															
24VP4-A	See 24ADP4 24VP4 A 24CP4-A 24TP4.															
27EP4	G	Yes	FG	None	None	M	M	90	85	68	23 ¹ / ₂	27	25 ¹ / ₂	20 ¹ / ₂	7 ¹ / ₂	24 ¹ / ₂ x 18 ¹ / ₂
27MP4	M	Yes	FFG	None	None	M	M	90	85	69	22 ¹ / ₂	27 ¹ / ₂	23 ¹ / ₂	20 ¹ / ₂	7 ¹ / ₂	23 ¹ / ₂ x 18 ¹ / ₂
27RP4	G	Yes	FG	2500	900	M	M	90	85	68	23 ¹ / ₂	27	25 ¹ / ₂	20 ¹ / ₂	7 ¹ / ₂	24 ¹ / ₂ x 18 ¹ / ₂
Color Types																
15GP22 ¹ / ₂	G	Yes	CL	3000	1500	E	M	—	45	35	26 ¹ / ₂	14 ¹ / ₂	—	—	10 ¹ / ₂	11 ¹ / ₂ x 8 ¹ / ₂

Data for these types continued on next page.

Data for these types continued from preceding page.

High Voltage Terminal	Spr. Ang.	Maximum Ratings							Typical Operating Conditions in Grid-Drive Service					P. 58 Non-Trip Magnet Hdg. (Mount)	 Type
		Flat High Voltage Electrode (Wire #) Vols	Focusing Electrode Vols	Grid No. 2 Vols	Grid No. 1 Vols	Post Heater Cathode Vols			Flat High Voltage Electrode (Wire #) Vols	Grid No. 3 Vols	Focusing Electrode Vols	Grid No. 4 Vols For Special Estimates of Focusing System			
						R(-)		R(+)							
						(During Warm Up)	(After Warm Up)								
Black-and-White Types (Cont'd)															
Cavity Cap	A	23000	—	500	-140	410	180	180	16000 18000	300 400	—	-28 to -72 -37 to -96	33 35	24ADP4/ 24VP4-A/ 24CP4-A/ 24TP4	
Cavity Cap	H	20000	+1000 -500	500	-140	410	180	180	16000 18000	300 400	-50 to +350 -50 to +350	-28 to -72 -36 to -94	None	24AEP4	
Cavity Cap	K	20000	+1000 -500	500	-140	410	180	180	14000 16000	300 400	-50 to +350 -50 to +350	-28 to -72 -36 to -94	None	24AHP4	
Cavity Cap	H	20000	+1000 -500	500	-140	410	180	180	18000	300	-75 to +400	-35 to -72	None	24AUP4	
Cavity Cap	K	20000	+1000 -500	500	+140	—	180	180	16000 20000	50 64	0 to +400 0 to +400	+32 to +47 +42 to +58	None	24BAP4	
See 24ADP4, 24VP4-A, 24CP4-A, 24TP4															
Cavity Cap	K	20000	+1000 -500	500	-140	410	180	180	16000 18000	300 400	-65 to +330 -75 to +400	-28 to -72 -37 to -96	33 35	24CP4-A 24DP4-A/ 24YP4	
See 24ADP4/24VP4-A, 24CP4-A, 24TP4.															
See 24ADP4, 24VP4-A, 24CP4-A, 24TP4.															
Cavity Cap	F	20000	—	500	-140	410	180	180	16000	300	—	-28 to -72	38	24TP4 24VP4-A 27EP4	
Metal-Shell Lip	F	18000	—	500	-125	410	180	180	16000 16000	300 400	—	-28 to -72 -37 to -96	33 33	27MP4	
Cavity Cap	A	20000	—	500	-140	410	180	180	16000	300	—	-28 to -72	—	27RP4	
Color Types															
Metal Flange	M	20000	5000	500	-200	410	180	180	For additional data, refer to technical bulletin available on request.			None	15GP22		

RCA PICTURE TUBE CHARACTERISTICS CHART (Cont'd)

RCA Type	Envelope	Aluminized Screen	Faceplate ⁺	External Conductive Coating		Focusing Method	Deflection Method	Approx. Deflection Angle Degrees			Maximum Dimensions Inches				Neck Length Inches	Minimum Screen Size Inches
				Max. mm [†]	Min. mm [†]			Hor.	Vert.	Overall Length	Envelope Dia. or Height	Width	Height			
Color Types (Cont'd)																
21AXP22 [Ⓞ]	Ⓜ	Yes	FG	None	None	E	M	—	70	55	25 $\frac{1}{16}$	20 $\frac{1}{16}$ †	—	—	9 $\frac{1}{16}$	19 $\frac{1}{16}$ x 15 $\frac{1}{16}$
21AXP22-A ⁺	Ⓜ	Yes	FG	None	None	E	M	—	70	55	25 $\frac{1}{16}$	20 $\frac{1}{16}$ †	—	—	9 $\frac{1}{16}$	19 $\frac{1}{16}$ x 15 $\frac{1}{16}$
21AXP22-A/ 21AXP22 [Ⓞ]	Ⓜ	Yes	FG	None	None	E	M	—	70	55	25 $\frac{1}{16}$	20 $\frac{1}{16}$ †	—	—	9 $\frac{1}{16}$	19 $\frac{1}{16}$ x 15 $\frac{1}{16}$
21CYP22 [Ⓞ]	Ⓞ	Yes	FG	2500	2000	E	M	—	70	55	25 $\frac{13}{16}$	20 $\frac{13}{16}$	—	—	9 $\frac{5}{16}$	19 $\frac{1}{4}$ x 15 $\frac{1}{4}$

Light face = Discontinued type.

- Ⓞ = Glass rectangular.
- Ⓜ = Metal rectangular.
- CL = Clear glass.
- FG = Frosted Filterglass.
- FG = Filterglass.
- M = Magnetic.
- E = Electrostatic.
- Ⓞ = Glass round.
- Ⓞ = Metal round.

Note:

- Unless otherwise noted all picture tubes shown have 6.3-volt/600-milliamperes heaters.
- K 5.5-volt/5.1 ampere heater.
- Ⓞ 5.4-volt/450-milliamperes heater.
- ◆ 6.3-volt/1.8-ampere heater (three 600-milliamperes heaters paralleled internally).
- Ⓞ Spherical, unless otherwise specified.
- + Cylindrical faceplate.
- † At upper lip-terminal.


Ⓞ This type has a flat, aluminized, filterglass, phosphor-dot, screen plate.

Ⓞ Deflection factors (dc/in.) for typical operating conditions shown:

Ⓞ₁ & Ⓞ₂ (small screen)
100 to 200

Ⓞ₂ & Ⓞ₃ (small base)
100 to 200

- ‡ At faceplate.
- ◆ Projection type.

High Voltage Terminal	Dac- ing	Maximum Ratings							Typical Operating Conditions in Cold-Drive Service				P M Ion-Trap Magnet Min. Gauss	 Type
		Final High-Voltage (Ult ⁺) Volts	Focusing Electrode Volts	Grid- No. 2 Volts	Grid- No. 1 Volts [†]	Peak Anode-Cathode Volts			Final High-Voltage (Ult ⁺) Volts	Grid- No. 2 Volts	Focusing Electrode Volts	Grid No. 1 Volts For Visual Estimation of Focused Beams		
						N(-)		N(+)						
						During Warm-Up [•]	After Warm-Up							
Color Types (Cont'd)														
Metal-Shell Lip	N	25000	6000	800 [•]	-400 [•]	410	180	180	For additional data, refer to technical bulletin available on request.			None	21AXP22 _b	
Metal Shell	O	25000	6000	800 [•]	-400 [•]	410	180	180	For additional data, refer to technical bulletin available on request.			None	21AXP22-A ₆	
Metal Shell	N	25000	6000	800 [•]	-400 [•]	410	180	180	Additional data available on request.			None	21AXP22-A/ 21AXP22 _b	
Cavity Cap	P	25000	6000	600 [•]	-400 [•]	410	180	180	For additional data, refer to technical bulletin available on request.			None	21CYP22 _b	

• ULTOR is defined as the electrode, or the electrode in combination with one or more additional electrodes connected within the tube to it, to which is applied the highest dc voltage for accelerating the electrons in the beam prior to its deflection.

† Positive bias value = 0 volts; positive peak value = 2 volts.

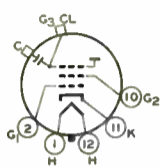
• Referred to grid No. 1—Cathode-Drive Service.

• During equipment warm-up not exceeding 15 seconds.

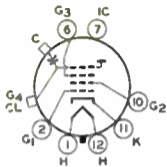
• Grid No. 2 connected to final high-voltage electrode within tube.

• Ketch gun

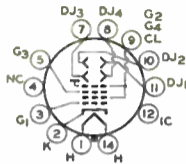
• This value has been specified to take care of the condition where an ac voltage is provided for dynamic focusing.



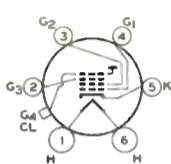
A
ULTOR - $G_3 + CL$



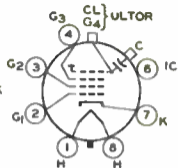
B
ULTOR - $G_4 + CL$
FOCUSING ELECTRODE - G_3



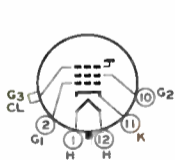
C
ULTOR - $G_2 + G_4 + CL$
FOCUSING ELECTRODE - G_3



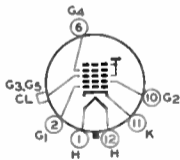
D
ULTOR - $G_4 + CL$
FOCUSING ELECTRODE - G_3



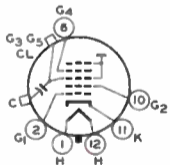
E
ULTOR - $G_3 + CL$



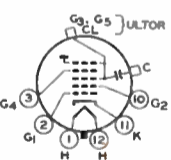
F
ULTOR - $G_3 + CL$



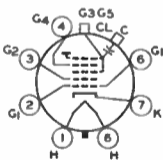
G
ULTOR - $G_3 + G_5 + CL$
FOCUSING ELECTRODE - G_4



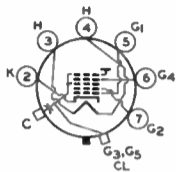
H
ULTOR - $G_3 + G_5 + CL$
FOCUSING ELECTRODE - G_4



J
ULTOR - $G_3 + G_5 + CL$
FOCUSING ELECTRODE - G_4

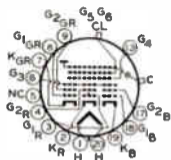


K
ULTOR - $G_3 + G_5 + CL$
FOCUSING ELECTRODE - G_4



L

ULTOR - $G_3 + G_5 + CL$
 FOCUSING ELECTRODE - G_4



M

ULTOR - $G_5 + G_6 + CL$
 FOCUSING ELECTRODE - G_3



N

ULTOR - $G_4 + G_5 + CL$
 FOCUSING ELECTRODE - G_3



O

ULTOR - $G_4 + G_5 + CL + R$
 FOCUSING ELECTRODE - G_3



P

CAP OVER PIN No. 1:
 ULTOR - $G_4 + G_5$
 CAP OVER PIN No. 2:
 $G_6 + CL$ & HIGH-VOLTAGE
 TERMINAL. Connect High-Voltage
 Supply to this Cap and also
 connect 50,000-ohm resistor
 between this Cap and the Cap
 over Pin No. 1 (Ulter Cap).
 FOCUSING ELECTRODE - G_3

RCA PREFERRED ENTERTAINMENT TUBE TYPES

For New Equipment Design

The list of Preferred Tube Types is presented to assist equipment manufacturers in formulating their plans for future production of electronic equipment. It is based on a careful survey of the needs of the engineering and manufacturing fields.

By using Preferred Tube Types, electronic-equipment manufacturers can reduce manufacturing costs for the following reasons:

1. LOWER INITIAL COST OF TUBES
2. UNIFORM TUBE QUALITY FROM LONGER PRODUCTION RUNS
3. STANDARDIZATION ON FEWER COMPONENTS
4. BETTER TUBE AVAILABILITY
5. CUSTOMER SATISFACTION

This list is subject to change resulting from technological advances in tube design and application. Such changes will be incorporated in revised issues of this list, which will be available on request.

RCA PREFERRED ENTERTAINMENT TUBE TYPES

RADIO RECEIVER AND PHONOGRAPH APPLICATIONS

RECTIFIERS and DIODE DETECTORS	CONVERTERS	AMPLIFIERS, OSCILLATORS, MIXERS						OUTPUT AMPLIFIERS
		Triodes		Triode- Pentode	Pentodes			
		Twin	With Diodes		Sharp Cutoff	Remote Cutoff	With Diode	
5U4-GB 5Y3-GT 6AL5 35W4	1R5 6BE6 6DT8 6U8-A 12BE6 12DT8	6CG7 7025 ^{aa} 12AX7 ^a	6AV6 12AV6	7199*	1U4 6AU6 12AU6	6BA6 12BA6	1U5	3V4 6AQ5-A 6973* 6L6-GB 7027-A* 6V6-GT 25EH5 35C5 50EH5

*For Higher-Fidelity applications.

^aTapped heater, for 6.3-volt or 12.6-volt operation.

RCA PREFERRED ENTERTAINMENT TUBE TYPES TELEVISION RECEIVER APPLICATIONS

TUNER TUBES				AMPLIFIERS			
RF Amplifiers	Oscillators Mixers	IF		Video	Audio	Deflection	
2CY5 6BC8 6BQ7-A 6CY5	2AF4-A 5CG8 6AF4-A 6CG8-A	3BZ6 6AM8-A 6BZ6	3CB6 6AU6 6CB6-A	6AW8-A 8AW8-A 12BY7-A	5AQ5 6AQ5-A 6AV6 12CU5/12C5	6CD6-GA 6DQ5 6EM5	6CM7 6DQ6-A 8EM5 12DQ6-A
DEFLECTION OSCILLATORS & CONTROL TYPES	DETECTORS		RECTIFIERS			HIGH-VOLTAGE REGULATOR	
	Sound	Video	High-Voltage	Low-Voltage	Damper Types		
5U8 6CG7 6CM7 6CS6 6U8-A	3DT6 6DT6	6AM8-A	1B3-GT 1V2 3A3	5U4-GB 5Y3-GT	6AU4-GTA 6AX4-GT 12AX4-GTA	6BK4	
PICTURE TUBES							
Application	Portable		Table & Console			De Luxe Console	Color
Type	17BZP4	17DKP4	21CEP4	21DAP4	21EQP4	24AMP4	21CYP22
Diag. Defl. Angle Neck } 5 ⁷ / ₁₆ " Length } 3 ⁹ / ₁₆ " Features	110° x	110° x ‡	110° x	110° x	110° x	110° x	70° ‡

‡Light-weight Type.

‡All-Glass Envelope.

RCA QUICK-SELECTION GUIDE

To Tubes for Communications, Industry, and Military Uses

VACUUM POWER TUBES

Type	Heater or Filament Volts	Maximum Dimensions Inches		Amplification Factor	Max. Plate Ratings ^a	
		Length	Diam.		DC Volts	Dissipation Watts

TRIODES (AIR-COOLED)

3C33	12.6	3 ¹¹ / ₁₆	2 ⁵ / ₁₆	11b	±2000	15
801-A	7.5	5 ⁵ / ₁₆	2 ¹ / ₁₆	8	600	20
805	10	8 ¹ / ₂	2 ⁵ / ₁₆	variable	1500	125
808	7.5	6 ¹ / ₁₆	2 ¹³ / ₁₆	47	2000†	75†
809	6.3	6 ⁹ / ₁₆	2 ⁷ / ₁₆	50	1000†	30†
810	10	8 ³ / ₄	2 ¹ / ₄ *	36	2500†	175†
811-A	6.3	6 ¹⁵ / ₃₂	2 ⁷ / ₁₆	160	1500†	65†
812-A	6.3	6 ¹⁵ / ₃₂	2 ⁷ / ₁₆	29	1500†	65†
826	7.5	3 ¹¹ / ₁₆	2 ³ / ₈	31	1000†	55†
830-B	10	6 ¹¹ / ₁₆	2 ¹ / ₁₆	25	1000	60
833-A	10	8 ¹³ / ₁₆	4 ¹⁹ / ₃₂	35	3300†	350†
834	7.5	6 ³ / ₈	2 ¹¹ / ₁₆	10.5	1250	50
838	10	7 ³ / ₈	2 ⁵ / ₁₆	variable	1250	100
845	10	7 ³ / ₈	2 ⁵ / ₁₆	5.3	1250	100
1626	12.6	4 ³ / ₈	1 ⁹ / ₁₆	5	250	5
5556	4.5	4 ¹ / ₂	1 ³ / ₈	8.5	350	10
8000	10	8 ³ / ₄	2 ¹ / ₄ *	16.5	2500†	175†
8005	10	6 ¹¹ / ₁₆	2 ⁷ / ₁₆	20	1500†	85†
8025-A	6.3	4 ¹ / ₁₆	1 ⁵ / ₁₆ *	18	1000†	30†

†For Intermittent Commercial and Amateur Service.

^aAbsolute values for Continuous Commercial Service, unless otherwise specified. b Per Unit. *Maximum Radius.

RCA Quick Selection Guide

VACUUM POWER TUBES

Type	Heater or Filament Volts	Maximum Dimensions Inches		Amplification Factor	Max. Plate Ratings ^A	
		Length	Diam.		DC Volts	Dissipation Watts

TRIODES (WATER-COOLED)

9C21	19.5	24½	9½	40	17000	40000
207	22	20¼♦	6½ ³² *	20	15000	10000
880	12.6	11½	7	20	10500	20000
889-A	11	10 ¹¹ / ₁₆	3¾	21	8500	5000
891	11#	20¾	6½ ³² *	8.5	12000	6000
892	11#	20¾	6½ ³² *	50	15000	10000
893-A	20#	26¾	6 ⁹ / ₁₆ *	34.5	20000	20000
5770	11	24½	9½	40	17000	50000
5771	7.5	11 ⁹ / ₁₆	7	20	12500	22500
6383	6.3	4 ⁹ / ₃₂	1.760	25	1500	600
6949	7.5	40	10.06	60	20000	400000

TRIODES (FORCED-AIR-COOLED)

2C39-A	6.3	2¾	1 ¹⁷ / ₆₄	100	1000	100
4C33	5	4¾	2 ¹ / ₁₆	25	13000¶	250
9C22	19.5	25	17	41	17000	20000
9C25	6	17¾	14¼	32	11500	17500
833-A	10	8 ¹³ / ₁₆	4 ¹⁹ / ₃₂	35	4000	450
889R-A	11	11½	5½ ³² *	21	8500	5000
891-R	11#	22	6½ ³² *	8.5	10000	4000
892-R	11#	22	6½ ³² *	50	12500	4000
893A-R	20#	28	8 ¹³ / ₁₆	34.5	20000	20000
5588	6.3	3 ¹³ / ₃₂	1.76	16	1000	200
5604-A	11	13¾	5½*	20	12500	10000
5671	11	25	8.5*	40	15000	25000
5713	3.3	4¾	2 ¹ / ₁₆	25	1500	250
5762/7C24	12.6	7¼♦	4 ¹¹ / ₁₆	29	6200	3000
5786	11	9¾	2.895	32	3000	600
5946	6.3	3 ¹³ / ₃₂	1.76	25	7500¶	250
6161	6.3	3 ¹³ / ₃₂	1.76	25	1600	250

TETRODES (AIR-COOLED)

860	10	8¼♦	4¼*	1100∅	3000	100
861	11	17 ⁷ / ₃₂	6¾*	2400∅	3500	400
865	7.5	5¾	2 ¹ / ₁₆	750∅	750	15

*Maximum Radius. #Per Section.

^AAbsolute values for Continuous Commercial Service, unless otherwise specified.

¶Peak Positive-Pulse Plate-Supply Volts.

♦Excluding Flexible Leads.

∅Transconductance.

RCA Quick Selection Guide

VACUUM POWER TUBES

Type	Heater or Filament Volts	Maximum Dimensions Inches		Trans-conductance* Micro-mhos	Max. Plate Ratings [†]	
		Length	Diam.		DC Volts	Dissipation Watts

TETRODES (WATER-COOLED)

8D21	3.2	12 ¹ / ₃₂	5 ³ / ₄	5§b	6000	6000
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TETRODES (FORCED-AIR-COOLED)

6166	5	11.63	6.38	10§	6600	10000
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BEAM POWER TUBES (FORCED-AIR-COOLED)

Type	Heater or Filament Volts	Maximum Dimensions Inches		Amplification Factor	Max. Plate Ratings	
		Length	Diam.		DC Volts	Dissipation Watts
4-65A	6	4 ³ / ₈	2 ³ / ₈	5 §	3000	65
4-125A/4D21	5	5 ¹¹ / ₁₆	2 ³ / ₈	5.9§	3000	125
4-250A/5D22	5	6 ³ / ₈	3 ⁹ / ₁₆	5.1§	4000	250
4-1000A	7.5	9 ⁵ / ₈	5 ¹ / ₄	7 §	6000	1000
4X150A	6	2 ¹⁵ / ₃₂	1.635	5 §	1250	150
4X150D	Same as 4X150A but has 26.5-volt heater.					
4X500A	5	4 ³ / ₈	2 ³ / ₈	6.2§	4000	500
827-R	7.5	6 ³ / ₈ †	4 ¹ / ₁₆	16 §	3500	800
6155/4-125A	5	5 ³ / ₃₂	2 ⁷ / ₁₆	6.2§	3000	125
6156/4-250A	5	5 ²⁹ / ₃₂	3 ⁷ / ₁₆	5.1§	4000	250
6181	120*	7 ¹ / ₄	5 ¹ / ₃₂	7 §	2000	2000
6816	6.3	1.955	1.265	16 §	1000	115
6884	Same as 6816 but has 26.5-volt heater.					
7034/4X150A	6	2 ¹⁵ / ₃₂	1.635	5 §	• •	250
7035/4X150D	Same as 7034/4X150A but has 26.5-volt heater.					
7094	6.3	5	2.56	7 §	1500 †	125 †
7203/4CX250B	6	2.464	1.640	5.2§	2000	250
7204/4X250F	Same as 7203/4CX250B but has 26.5-volt heater.					
7213	5.5	3.34	3.75	17 §	2500	1500
7270	6.3	4.65	2.06	8 §	1350 †	80 †
7271	Same as 7270 but has 13.5-volt heater.					

BEAM POWER TUBES AND PENTODES (AIR-COOLED)

2E24	6.3	3 ²¹ / ₃₂	1 ⁵ / ₁₆	7.5§	600 †	13.5 †
2E26	6.3	3 ²¹ / ₃₂	1 ⁵ / ₁₆	6.5§	600 †	13.5 †
3E29	Similar to type 829-B but for pulsed operation.					

*Maximum.

†Absolute values for Continuous Commercial Service.

‡For Intermittent Commercial and Amateur Service.

§Grid-Screen Mu-Factor.

• • Max. DC plate volts, 2000 for frequencies up to 150 mc; max. DC plate volts, 1250 for frequencies of 150 mc to 500 mc. bPer Unit.

‡Excluding flexible leads.

RCA Quick Selection Guide

VACUUM POWER TUBES

BEAM POWER TUBES AND PENTODES (AIR-COOLED) (cont'd)

Type	Heater or Filament Volts	Maximum Dimensions Inches		Trans-conductance Micro-mhos	Max. Plate Ratings ^Δ	
		Length	Diam.		DC Volts	Dissipation Watts
4E27/8001	5	6 ³ / ₁₆	2 ¹¹ / ₁₆	2800	4000	75
4E27A/ 5-125B	5	6 ³ / ₁₆	2 ³ / ₄	2150	4000	125
802	6.3	5 ³ / ₄	2 ¹ / ₁₆	2250	600†	13†
803	10	9 ³ / ₄	2 ⁹ / ₁₆	4000	2000	125
804	7.5	7 ¹¹ / ₁₆	2 ¹ / ₁₆	3250	1500†	50†
807	6.3	5 ³ / ₄	2 ¹ / ₁₆	6000	750†	30†
813	10	7 ¹ / ₂	2 ⁹ / ₁₆	3750	2250†	125†
814	10	7 ¹¹ / ₁₆	2 ¹ / ₁₆	3300	1500†	65†
815∅	6.3/12.6	4 ⁹ / ₁₆	2 ³ / ₄	4000	500†	25†
828	10	7 ¹¹ / ₁₆	2 ¹ / ₁₆	2700	1500†	80†
829-B∅	6.3/12.6	4 ⁵ / ₁₆	2 ³ / ₄	8500	750†	40†
832-A∅	6.3/12.6	3 ⁵ / ₁₆	2 ³ / ₄	3500	750†	20†
837	12.6	5 ³ / ₄	2 ¹ / ₁₆	3400	500	12
1613	6.3	3 ³ / ₄	1 ⁵ / ₁₆	2500	350	10
1614	6.3	4 ⁵ / ₁₆	1 ⁵ / ₁₆	6050	450†	25†
1619	2.5	4 ⁵ / ₁₆	1 ⁵ / ₁₆	4500	400	15
1624	2.5	5 ³ / ₄	2 ¹ / ₁₆	4000	600	25
1625	12.6	5 ³ / ₄	2 ¹ / ₁₆	6000	750†	30†
5618	3.0/6.0	2 ⁵ / ₈	3/4	3600	300†	5†
5763	6	2 ⁵ / ₈	7/8	7000	350†	17†
6146	6.3	3 ¹³ / ₁₆	1 ²³ / ₃₂	4.5§	750†	25†
6159	Same as 6146 but has 26.5-volt heater.					
6293	See Technical Bulletin.					
6417	Same as 5763 but has 12.6-volt heater.					
6524∅	6.3	3 ⁹ / ₁₆	1 ¹¹ / ₁₆	4500	600†	25†
6850	Same as 6524 but has 12.6-volt heater.					
6883	Same as 6146 but has 12.6-volt heater.					
6893	Same as 2E26 but has 12.6-volt heater.					
7054	13.5	2 ⁵ / ₈	.875	11500	300	5
7060	13.5	2 ³ / ₁₆	.875	7000	300	2.75
7212	6.3	3 ¹³ / ₁₆	1 ²³ / ₃₂	7000	750†	25†

BEAM POWER TUBES AND PENTODES (Water-Cooled)

6448	1.35 •	7.97	11.38	8§	7000	26000
6806	1.35 •	7.97	11.38	8§	9000	35000
6952¶	0.95	8.93	11 ¹ / ₄	7§	30000	3000

^ΔAbsolute values for Continuous Commercial Service.

†For Intermittent Commercial and Amateur Service.

§Grid-Screen Mu-Factor.

∅Twin Unit Type.

¶Gov't and use only.

• Per section.

RCA Quick Selection Guide

GLOW-DISCHARGE (COLD-CATHODE) TUBES

Type	Maximum Dimensions Inches		Operating Volts	Operating Current DC Ma.	
	Length	Diam.		Min.	Max.

VOLTAGE-REGULATOR TYPES

0A2	2 $\frac{3}{8}$	$\frac{3}{4}$	151	5	30
0A3	4 $\frac{1}{8}$	1 $\frac{1}{16}$	75	5	40
0B2	2 $\frac{3}{8}$	$\frac{3}{4}$	108	5	30
0C2	2 $\frac{3}{8}$	$\frac{3}{4}$	75	5	30
0C3	4 $\frac{1}{8}$	1 $\frac{1}{16}$	108	5	40
0D3	4 $\frac{1}{8}$	1 $\frac{1}{16}$	153	5	40
991	1 $\frac{1}{16}$	$\frac{3}{8}$	59	0.4	2
5651*	2 $\frac{3}{8}$	$\frac{3}{4}$	87	1.5	3.5
6073	2 $\frac{3}{8}$	$\frac{3}{4}$	151	5	30
6074/0B2	2 $\frac{3}{8}$	$\frac{3}{4}$	108	5	30

Type	Dimensions Inches		Max. Ratings		
	Length	Diam.	Peak Anode Volts	Peak Cathode Ma.	Av. Cathode Ma.

RELAY TYPES

0A4-G	4 $\frac{1}{8}$	1 $\frac{1}{16}$	225	100	25
1C21	2 $\frac{3}{8}$	1 $\frac{5}{16}$	180	100	25
5823	2 $\frac{3}{8}$	$\frac{3}{4}$	200	100	25

RECTIFIERS

Type	Heater or Fila- ment Volts	Maximum Dimensions Inches		Max. Plate or Anode Ratings	
		Length	Diam.	Peak Inv. Volts	Amp. Av.

VACUUM TYPES

2X2-A	2.5	4 $\frac{17}{32}$	1 $\frac{1}{16}$	12500†	0.0075†#
5R4-GY□	5	5 $\frac{5}{16}$	2 $\frac{1}{16}$	2800†	0.175†
5R4-GYB□	5	4 $\frac{1}{4}$	1.562	2650	0.175
579-B	2.5	7 $\frac{7}{16}$	2 $\frac{1}{16}$	20000	0.025
836	2.5	6 $\frac{9}{16}$	2 $\frac{7}{16}$	5000	0.25
878	2.5	7 $\frac{3}{8}$	1 $\frac{13}{16}$	20000	0.005
1616	2.5	6 $\frac{13}{16}$	2 $\frac{1}{16}$	6000	0.13
5825	1.6	5 $\frac{27}{32}$	2 $\frac{1}{16}$	60000	0.002
8013-A	2.5	6 $\frac{1}{16}$	2 $\frac{1}{16}$	40000	0.020
8020	5	8	2 $\frac{5}{16}$	40000	0.100

*Voltage reference type.

□ Full-Wave Type.

#Per plate.

†Design center values.

RCA Quick Selection Guide

RECTIFIERS (cont'd)

Type	Cathode Volts	Maximum Dimensions Inches		Max. Plate or Anode Ratings	
		Length	Diam.	Peak Inv. Volts	Av. Amp.
MERCURY-VAPOR TYPES					
83 [□]	5	5½	2½/16	1550†	0.225†
575-A	5	11½	3½	15000	1.5
673	5	11½/16	3½	15000	1.5
816	2.5	4½/16	1½/16	7500	0.125
857-B	5	19½♦	7½	22000	10
866-A	2.5	6½/16	2½/16	10000	0.25
869-B	5	14½/16	5½	20000	2.5
872-A	5	8½	2½/16	10000	1.25
5558	5	7	3	5000	2.5
5561	5	11¼	3½/16	3000	6.4
6894	5	10½/32	2½	20000	1.8
6895	5	10½/32	2½	20000	1.8
8008	5	8¾	2½/16	10000	1.25

GAS TYPES

3B25	2.5	6½/16	2½/16	4500	0.5
3B28	2.5	6½/32	2½/16	10000	0.25

THYRATRONS

TRIODES

C1K/6014	2.5	4¼	1½/16	1250	1.0
C3J/5632	2.5	6	1½/16	1250	2.5
C3J-A/5684	2.5	6	1½/16	1250	2.5
C6J/5C21	2.5	9½	2½/32	1250	6.4
C6J-A/5685	2.5	9½	2½/32	1250	6.4
C16J/5665	2.5	10½♦	2½/16	1250	18
3C23	2.5	6½	2½/16	1250	1.5
627	2.5	7	2½/16	2500	0.64
629	2.5	4¼	1½/16	350	0.04
676	5	11¼	3½/16	2500	6.4
677	5	11¼	3½/16	10000	4.0
884	6.3	4½	1½/16	350	0.075
885	2.5	4½/16	1½/16	350	0.075
5557	2.5	6½	2½/16	5000	0.5
5559	5	7¼	3	1000	2.5
5563-A	5	10½/32	2½	20000	1.6
6130/3C45	6.3	5½/16	1½/16	3000	0.045

TETRODES

2D21	6.3	2½	¾	1300	0.1
3D22-A	6.3	4½	2½	1500	0.8
105	5	11¼♦	2½*	2500	6.4

• For operation up to 50000 ft.

♦Excluding Flexible Leads.

□Full-Wave Type.

*Maximum Radius.

†Design Center Values.

RCA Quick Selection Guide THYRATRONS (cont'd)

Type	Cathode Volts	Maximum Dimensions Inches		Max. Plate or Anode Ratings	
		Length	Diam.	Peak Inv. Volts	Av. Amp.

TETRODES (cont'd)

172	5	10 ^{27/32}	2 ^{5/8} *	2000	6.4
502-A	6.3	2 ^{5/8}	1 ^{5/16}	1300	0.1
632-B	5.0	8 ^{5/16}	1 ^{3/4} *	1500	2.5
672-A	5	8 ^{1/2}	2 ^{5/16}	2500	3.2
2050	6.3	4 ^{1/8}	1 ^{9/16}	1300	0.1
5560	5	7 ^{15/16}	2 ^{1/4} *	1000	2.5
5696	6.3	1 ^{3/4}	3/4	500	0.025
5727	6.3	2 ^{1/8}	3/4	1300	0.1
6012	6.3	3 ^{3/8}	1 ^{23/32}	1300	0.5

IGNITRONS

Type	Maximum Dimensions Inches			Max. Anode Ratings††		Max. Anode Rating*†	
	Size	Approx. Length	Radius	KVA Demand	Corresponding Av. Anode Amp.	Peak Inv. Volts	Av. Amp.
5550	(A)	10	1 ^{1/2}	300	12.1	—	—
5551-A	(B)	13 ^{1/2}	2 ^{3/8}	600	30.2	—	—
5552-A	(C)	15 ^{1/4}	3 ^{3/8}	1200	75.6	—	—
5553-B	(D)	20	4 ^{11/16}	2400	192.	—	—
5555		18 ^{1/2}	4 ^{9/16}	—	—	2100	150
5822-A		15 ^{1/4}	3 ^{3/8}	—	—	1500‡	56‡

PHOTOTUBES

Type	Maximum Dimensions Inches		Max. Anode-Supply Volts	Luminous Sensitivity Microamp. Per Lumen	Spectral Response
	Length	Diam.			

GAS TYPES

1P29	4 ^{1/2}	1 ^{1/2}	100	40	S-3
1P37	4 ^{1/2}	1 ^{1/2}	100	135	S-4
1P40	Same as 930 except for non-hygroscopic base.				
1P41	2 ^{1/16}	1 ^{3/16}	90	90	S-1
868	4 ^{1/8}	1 ^{1/2}	100	90	S-1
918	4 ^{1/2}	4 ^{1/8}	90	150	S-1

*Maximum Radius. ††For welder-control service.

*†For power rectification.

‡For frequency-changer resistance-welding service.

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PHOTOTUBES (cont'd)

Type	Maximum Dimensions Inches		Max. Anode-Supply Volts	Luminous Sensitivity Microamp. Per Lumen	Spectral Response
	Length	Diam.			

GAS TYPES (cont'd)

920 [¶]	4	1 ³ / ₁₆	90	100	S-1
921	1 ²³ / ₃₂	0.890	90	135	S-1
923	3 ⁹ / ₁₆	1 ³ / ₁₆	90	135	S-1
927	2 ¹³ / ₃₂	0.669	90	125	S-1
928	3 ⁹ / ₁₆	1 ³ / ₁₆	90	65	S-1
930	3 ¹ / ₁₆	1 ⁹ / ₃₂	90	135	S-1
5581	3 ¹ / ₁₆	1 ⁹ / ₃₂	100	135	S-4
5582	1 ²³ / ₃₂	0.890	100	120	S-4
5583	2 ¹³ / ₃₂	0.669	100	135	S-4
5584 [¶]	4	1 ³ / ₁₆	100	120	S-4
6405/1640	4 ⁷ / ₁₆	1 ¹ / ₈	90	35	S-1
6953	3 ¹ / ₁₆	1 ⁹ / ₃₂	90	200	S-1

VACUUM TYPES

1P39	Same as 929 except for non-hygroscopic base.				
1P42	1 ¹³ / ₃₂	1/4	-180	37	S-9
917	4 ⁷ / ₁₆	1 ¹ / ₈	500	20	S-1
919	4 ⁷ / ₁₆	1 ¹ / ₈	500	20	S-1
922	1 ¹¹ / ₁₆	0.890	500	20	S-1
925	2 ³ / ₈	1 ⁹ / ₃₂	250	20	S-1
926	1 ²³ / ₃₂	0.890	500	6.5	S-3
929	3 ¹ / ₁₆	1 ⁹ / ₃₂	250	45	S-4
934	2 ¹³ / ₃₂	0.669	250	30	S-4
935	4 ¹ / ₈	1 ⁹ / ₃₂	250	35	S-5
5652*	2 ³ / ₈	1 ⁹ / ₃₂	250	45	S-4
5653	3 ¹ / ₁₆	1 ⁹ / ₃₂	250	20-100	S-4
6570	4 ⁷ / ₁₆	1 ¹ / ₈	500	30	S-1
7043	3 ⁵ / ₁₆	1 ⁹ / ₃₂	250	45	S-4

MULTIPLIER PHOTOTUBES

Type	Maximum Dimensions Inches		Max. Anode-Supply Volts	Luminous Sensitivity Amp/Lumen	Spectral Response
	Length	Diam.			
1P21	3 ¹¹ / ₁₆	1 ⁵ / ₁₆	1250	80 •	S-4
1P22	3 ¹¹ / ₁₆	1 ⁵ / ₁₆	1250	1.0 •	S-8
1P28	3 ¹¹ / ₁₆	1 ⁵ / ₁₆	1250	50 •	S-5
931-A	3 ¹¹ / ₁₆	1 ⁵ / ₁₆	1250	24 •	S-4
2020	5 ¹³ / ₁₆	2 ⁵ / ₁₆	1500	6 • •	S-11
5819	5 ¹³ / ₁₆	2 ⁵ / ₁₆	1250	25 •	S-11
6199	4.57	1.56	1250	27 •	S-11

¶Twin type. *Twin type; each unit has a composite anodecathode.
 • With supply volts=1000. • • With supply volts=1250.

RCA Quick Selection Guide

MULTIPLIER PHOTOTUBES (cont'd)

Type	Max. Dimensions Inches		Max. Anode-Supply Volts	Luminous Sensitivity Amp/Lumen	Spectral Response
	Length	Diam.			
6217	5 ¹³ / ₁₆	2 ⁵ / ₁₆	1250	24 •	S-10
6328▲	3.12	1.31	1250	35 •	S-4
6342-A	5.81	2.31	1500	14 • •	S-11
6372	7 ³ / ₄	2 ⁹ / ₁₆	1200	20 •	S-11
6472▲	2 ³ / ₄ !	1 ³ / ₁₆	1250	35 •	S-4
6655-A	5 ¹³ / ₁₆	2 ⁵ / ₁₆	1250	50 •	S-11
6810-A	7 ¹ / ₂	2 ³ / ₄	2400	750 ♦	S-11
6903	6 ⁹ / ₁₆	2 ⁵ / ₁₆	1250	24 •	S-13
7029	3 ³ / ₄	1 ⁹ / ₁₆	1250	40 •	S-17
7046	11 ¹ / ₂	5 ¹ / ₄	3400	180 #	□
7102	4.57	1.56	1500	4.5 • •	S-1
7117▲	3.12	1.31	1250	35 •	S-4
7200	5.69	1.31	1250	40 •	S-19
7264	7.5	2.38	2400	875 §§	S-11
7265	7.5	2.38	2400	1400 §§§	S-20
7326	6.78	2.38	2400	22.5 §	S-20

PHOTOCONDUCTIVE CELLS

Type	Maximum Dimensions Inches			Max. Polarizing Volts	Luminous Sensitivity Amp/Lumen	Spectral Response
	Overall Length	Width	Depth			
6694-A	0.500	0.375	.220	150	1 ¶	S-12
6957	2 ⁷ / ₃₂	1 ¹ / ₃₂ Dia.	—	250	1.64 ¶¶	S-15
7163	0.9	1.26 Dia.	—	250	0.82	S-15
7412	1.35	0.30 Dia.	—	200	4.5	S-15
7536	1.35	0.30 Dia.	—	200	4.5	S-15

PHOTOJUNCTION CELLS

Type	Maximum Dimensions Inches		Max. Polarizing Volts	Illumination Sensitivity A/FE-C	Spectral Response
	Length	Diam.			
7223	0.580!	0.083	50	0.2	S-14
7224	0.50 !	0.300	50	0.7	S-14
7467	0.875	0.35	50	0.7	S-14

▲ For headlight dimming service. ! Excluding flexible leads. • With Supply Volts=1000. • • With Supply Volts=1250. ♦ With Supply Volts=2000. ¶ With polarizing volts=90 and ambient temp.=25°C. # With Supply Volts=2800. □ Extended S-11, with response 2500 to 6500 Angstroms. ¶¶ With Polarizing Volts=50 and Ambient Temp.=25°C. §§ With Supply Volts=2400. § With Supply Volts=1800.

RCA Quick Selection Guide

CATHODE-RAY TUBES†

Type	Max. Overall Length Inches	Min. Screen Diam. Inches	Max. Final Electrode Volts	Volts DC/In† Deflection Factor	
				DJ ₁ -DJ ₂ ††	DJ ₃ -DJ ₄ *

OSCILLOGRAPH TYPES

Medium Persistence

1EP1	4 $\frac{1}{16}$	1 $\frac{1}{16}$	1500	210-310	240-350
2AP1-A	7 $\frac{3}{8}$	1 $\frac{1}{8}$	1000	184-276	157-235
2BP1	7 $\frac{13}{16}$	1 $\frac{1}{8}$	2500	115-155	74-100
3AP1-A	11 $\frac{1}{8}$	2 $\frac{1}{2}$	1500	61-91	59-87
3BP1-A	10 $\frac{1}{4}$	2 $\frac{3}{4}$	2000	85-115	62-85
3JP1●	10 $\frac{1}{4}$	2 $\frac{3}{4}$	4000	85-115	62-85
3KP1	11 $\frac{3}{8}$	2 $\frac{3}{4}$	2500	50-68	38-52
3RP1	9 $\frac{3}{8}$	2 $\frac{3}{4}$	2500	73-99	52-70
3RP1-A	Same as type 3RP1, except has flat face.				
3WP1	11 $\frac{3}{8}$	2 $\frac{3}{4}$	2500	41.5-50.5	28.5-35
5ABP1●	17 $\frac{1}{8}$	4 $\frac{9}{16}$	6000	26-36	18-24
5ADP1●	16 $\frac{15}{16}$	4 $\frac{1}{2}$	6000	26.7-33.3	20.3-25
5BP1-A	17 $\frac{1}{8}$	4 $\frac{1}{2}$	2000	35-38	32-44
5CP1-A●	17 $\frac{1}{8}$	4 $\frac{1}{2}$	4000	39-53	33-45
5UP1	15 $\frac{1}{8}$	4 $\frac{1}{2}$	2500	28-39	23-31
7VP1	14 $\frac{3}{8}$	6	4000	31-41	25-34
902-A	7 $\frac{3}{8}$	1 $\frac{1}{8}$	600	183-277	160-235

Medium-Short Persistence:

1EP11	Same as type 1EP1, except for phosphor.				
2BP11	Same as type 2BP1, except for phosphor.				
3KP4	Same as type 3KP1, except for phosphor.				
3KP11	Same as type 3KP1, except for phosphor.				
3WP11	Same as type 3WP1, except for phosphor.				
5ABP11●	Same as type 5ABP1, except for phosphor.				
5CP11-A●	Same as type 5CP1-A, except for phosphor.				
5UP11	Same as type 5UP1, except for phosphor.				
908-A	Same as type 3AP1-A, except for phosphor.				

Short Persistence:

5FP15-A§	11 $\frac{1}{2}$	4 $\frac{1}{4}$	8000	Mag. focus & deflec.	
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Medium-Long Persistence:

1EP2	Same as type 1EP1, except for phosphor.				
3WP2	Same as 3WP1, except for phosphor.				

Long Persistence:

5CP12●	Same as type 5CP1-A, except for phosphor.				
5FP14-A§	Same as type 5FP15-A, except for phosphor.				

†All have 6.3-v heaters except: the 3AP1-A which has 2.5-v heater; and the 7NP4 and 7WP4 which have 6.6-v heaters. †Per KV of final electrode volts. ††Deflecting electrodes nearer the face. *Deflecting electrodes nearer the base. ●Post-deflection accelerator type. §High resolution type.

RCA Quick Selection Guide CATHODE-RAY TUBES†

Type	Max. Overall Length Inches	Min. Screen Diam. Inches	Max. Final Electrode Volts	Deflection Factor Volts DC/In†	
				DJ ₁ -DJ ₂ ††	DJ ₃ -DJ ₄ *

Very Long Persistence:

3JP7 ●	Same as 3JP1, except for phosphor.				
3KP7	Same as type 3KP1, except for phosphor.				
5ABP7 ●	Same as type 5ABP1, except for phosphor.				
5AHP7	11½	4¼	10000	Elec. focus, mag. defl.	
5AHP7-A	Same as 5AHP7, but has aluminized screen.				
5CP7-A ●	Same as type 5CP1-A, except for phosphor.				
5FP7-A	11½	4¼	8000	Mag. focus & deflec.	
5UP7	Same as type 5UP1, except for phosphor.				
7BP7-A	13¾	6	8000	Mag. focus & deflec.	
7MP7	13¾	6	8000	Mag. focus & deflec.	
10KP7	18	9	10000	Mag. focus & deflec.	
12DP7-A	20¾	10	10000	Mag. focus & deflec.	
16ADP7	22	14¾	14000	Mag. focus & deflec.	

Type	Max. Overall Length Inches	Min. Screen Diam. Inches	Max. Final Electrode Volts	Max. Focusing Electrode Volts	Deflection Angle Approx. Degrees
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FLYING-SPOT TYPES:

3KP16	Same as 3KP1, except for phosphor.				
5AUP24#	12¾	4¼	27000	6000	40
5WP15#	11½ ¹⁵ / ₁₆	4¼	27000	6000	50
5ZP16#	14¾	4¼	27000	7000	40

TRANSCRIBER KINESCOPE:

5WP11#	11½ ¹¹ / ₁₆	4¼	27000	6000	50
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VIEW-FINDER KINESCOPIES:

5AYP4#	11½ ¹⁶ / ₁₆	4¼	10000	1500	53
5FP4-A	11½	4¼	8000	§	53

PROJECTION KINESCOPIES (For Theater Television):

5AZP4#	12¾ ¹⁶ / ₁₆	4½	40000	9000	50
7NP4★#	20¾	5x3¾	80000	20000	35
7WP4▲#	20¾ ¹⁶ / ₁₆	5x3¾	80000	20000	35

MONITOR KINESCOPIES:

7CP4	13½ ¹⁶ / ₁₆	6½	8000	2400	57
7OP4	13¾	6	10000	§	52
7TP4#	13½	6	12000	2000	50
8HP4#	10¾	7½ ¹⁶ / ₁₆	14000	1100	90
10SP4#	17	9¾	14000	2700	50

†All have 6.3-v heaters except: the 3AP1-A which has 2.5-v heater; and the 7NP4 and 7WP4 which have 6.6-v heaters. #Aluminized. ●, †, ††, *See preceding page. ★Projection-throw distance=60 ft. ▲Projection-throw distance=80 ft. §Magnetic focus.

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CAMERA TUBES

ICONOSCOPES:

- 1850-A—For pick-up from motion-picture film or slides. Utilizes electrostatic focus and magnetic deflection. Has a high ratio of signal to noise but relatively low sensitivity. Response covers entire visible spectrum.

IMAGE ORTHICONS:

All employ magnetic focus and deflection.

- 5820 For both outdoor and studio pickup. Has exceptional sensitivity combined with spectral response approaching that of the eye. Very stable in performance at all incident light levels on the object ranging from bright sunlight to a deep shadow.
- 6474 For use in color cameras utilizing the method of simultaneous pickup of the studio or outdoor scene to be televised. Capable of producing a picture having natural tone value and accurate detail.
- 6849 For use in industrial and scientific research television applications involving extremely low light levels. In a standard TV system, can produce signal information with illumination on the photo-cathode as low as 0.00001 foot-candle.
- 7198 For reliable performance under adverse environmental conditions such as severe shock and vibration, altitudes up to 60,000 ft. wide temperature range and high humidity.
- 7513 For high-quality performance in color cameras utilizing the simultaneous method of pickup, and in black-and-white cameras. Features precision construction for improved registration of images in color-camera equipment.

VIDICONS:

- 6198 For use in industrial TV applications. Features small size and simplicity. Employs as its light-sensitive element a photoconductive layer having spectral response approaching that of the eye. Has very good sensitivity. Utilizes magnetic focus and deflection.
- 6326 Similar to 6198 but intended primarily for use in compact TV cameras for either film or limited-motion live pickup.
- 7038 Broadcast-quality type. For live pickup with black-and-white TV cameras or with color-TV cameras utilizing the method of simultaneous pickup. Also useful for film pickup. No side tip.
- 7262 For use in small, compact, transistorized television cameras, black-and-white or color. Like the 7038, but is shorter and has 0.6-watt heater.

RCA Quick Selection Guide

VIDICONS (cont'd)

- 7263 Like the 7262, but designed to withstand operating conditions involving severe shock and vibration, altitudes up to 50,000 feet and high humidity.

MONOSCOPES

- 2F21 A 5" type with Indian-head test pattern for supplying signal to test video performance of TV receivers and transmitters. Utilizes electrostatic focus and magnetic deflection.
- 1699 Custom-built type like the 2F21 except that its pattern is individually styled to customer requirements.

IMAGE-CONVERTER TUBES

- 6032 For use with suitable optical systems for viewing a scene with infrared radiation.
- 6032-A—Unilaterally interchangeable with 6032 but is controlled for threshold visibility.
- 6914 Self-focusing type for use with suitable optical systems for viewing a scene with near-infrared radiation.
- 6914-A—Unilaterally interchangeable with 6914 but is controlled for threshold visibility.
- 6929 Small, self-focusing type for use with suitable optical systems for viewing scenes with near-infrared radiation.
- 7404 Small, self-focusing type for use with suitable optical systems for viewing an object or specimen with near-ultraviolet radiation.

STORAGE TUBES

- 6499 Radechon. Useful in digital or analogue information-processing systems.
- 6571 Computer type. For use primarily in binary-digital systems.
- 6866 5" direct-view, high-brightness, display type. Electrostatically deflected writing gun with writing speed of about 300,000 inches per second. Thirtyfive 31-pin base.
- 6896/1855 Graphechon. For use in data-processing applications where signal information must be transformed continuously from one time base to another.
- 7183 5" direct-view, high-brightness display type. Magnetically deflected writing gun for PPI-type display. Small-button, Neoditetrar 8-pin base and Small-button Miniature 7-pin base.
- 7315 5.25" direct-view, high-brightness display type. Electrostatically deflected writing gun with writing speed of about 3,000 inches per second. Diheptal 14-pin base.
- 7448 Like the 7315, but has a writing speed of about 300,000 inches per second.

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MAGNETRONS

- 4011-A—Tunable from 8750 to 9600 Mc in pulsed-oscillator service. Peak power output is 250 Kw.
- 6521 Designed and conservatively rated for long, reliable performance as a pulsed oscillator at a fixed frequency of 5400 Mc in weather radar equipment. Peak power output is 85 Kw.
- 6865-A—Tunable from 8750 to 9600 Mc. in pulsed-oscillator service. Peak power output is 220 Kw.
- 7008 Servo-tunable from 8500-9600 Mc., in pulsed-oscillator service. Peak power output is 220 Kw.
- 7110 } These three magnetron tubes differ only mechan-
7111 } ically in the location of the tuning controls and
7112 } the micro-meter-type indicator provided to facilitate frequency calibration of each type. Tunable from 8500 to 9600 Mc in pulsed-oscillator service. Peak power output is 230 Kw.

TRAVELING-WAVE TUBES

- 4009 Low-power amplifier of the helix-transmission-line type with integral periodic-permanent-magnets. Operates between 2000 and 4000 Mc as a driver for intermediate-power traveling wave amplifiers such as the RCA-4010.
- 4010 Intermediate-power amplifier. 1.5 watts saturated power output. Forced-air-cooled. Integral periodic-permanent-magnets.
- 6861 Low-noise, low-level type intended especially for the input stage of microwave receivers, such as radar, operating in the range of 2700 to 3500 Mc. Has a noise figure of 6.5 db and a gain of approximately 25 db. The rf-input and rf-output transducers are permanently set during manufacture.

VACUUM-GAUGE TUBES

- 1946 Thermocouple Type. For measuring gas pressures in the range from 1 mm to 0.0001 mm of mercury (1000 to 0.1 micron).
- 1947 Pirani Type. For measuring gas pressures in the range from 0.5 mm to 0.01 mm of mercury (500 to 10 microns).
- 1949 Ionization Type, hard-glass construction. For measuring gas pressures below 0.001 mm of mercury (0.1 micron).
- 1950 Ionization Type. Similar to type 1949, but soft-glass construction.

PENCIL-TYPE TUBES

- 5675 Medium-Mu Triode. For use in cathode-drive circuits at frequencies up to 3000 Mc. As a local oscillator, it is capable of giving a power output of 475 milliwatts at 1700 Mc.

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PENCIL-TYPE TUBES (cont'd)

- 5876 High-Mu Triode. General-purpose type. For use in cathode-drive circuits as an r-f amplifier, i-f amplifier, or mixer tube up to 1000 Mc; as a frequency multiplier up to 1500 Mc; and as an oscillator up to 1700 Mc. Delivers useful output of 5 watts at 500 Mc as an unmodulated Class C r-f amplifier, and 750 milliwatts as an oscillator at 1700 Mc.
- 5876-A—Like the 5876 but designed for military and critical industrial application.
- 5893 Medium-Mu Triode. Designed for use in cathode-drive circuits as a plate-pulsed oscillator up to 3300 Mc and as a cw oscillator, rf power amplifier, and frequency doubler up to 1000 Mc.
- 6173 UHF Diode. For use in pulse detection and pulse-power-measuring service. May be operated at frequencies as high as 3300 Mc.
- 6263 Medium-Mu Triode. For use in cathode-drive, rf power amplifiers and oscillators in mobile transmitters operating up to 60,000 feet without pressurized chambers. Under ICAS conditions, gives a useful power output of about 10 watts at 500 Mc. in unmodulated Class C amplifier service with a plate input of only 14 watts.
- 6264-A—Like the 6263 but has a mu of 40. For military and critical industrial applications.
- 6562 Intended for transmitting service in radiosonde applications at 1680 Mc.

TYPES FOR ELECTRONIC-COMPUTER AND OTHER "ON-OFF" CONTROL APPLICATIONS

- 5915 Pentagrid Amplifier. 7-pin miniature type designed for use as gated amplifier. Grid No. 1 and Grid No. 3 can each be used as independent control electrodes.
- 5968 Medium-Mu Twin Triode. 9-pin miniature type especially useful in multivibrator applications. Separate terminal for each cathode, and a mid-tapped heater for 6.3-volt or 12.6-volt operation.
- 5964 Medium-Mu Twin Triode. 7-pin miniature type especially useful in multivibrator applications.
- 5965 Medium-Mu Twin Triode. 9-pin miniature type especially useful in cathode-follower applications. Separate terminals for each cathode, and a mid-tapped heater for 6.3-volt or 12.6-volt operation.
- 6197 Sharp-Cutoff Power Pentode. 9-pin miniature type with a transconductance of 11,000 micromhos. Especially useful in pulse-amplifier applications.
- 6211 Like 5963 except that balance of cutoff bias between the two triode units is closely controlled.

RCA Quick Selection Guide

TYPES FOR ELECTRONIC-COMPUTER AND OTHER "ON-OFF" CONTROL APPLICATIONS (cont'd)

- 6350 Medium-Mu Twin Triode. 9-pin miniature type, having transconductance per unit = 4600 micromhos. Especially useful in cathode-follower applications in high-speed digital computers. Separate terminals for each cathode, and mid-tapped heater for 6.3-volt or 12.6-volt operation.
- 6814 Medium-Mu Triode. 8-lead subminiature type. For pulse-amplifier, inverter, and cathode-follower circuits of high-speed digital computers.
- 6887 Twin diode. 7-pin miniature type. Especially useful in switching circuits of medium-speed electronic computers. Low-wattage heater (only 1.26 watts).
- 7044 Medium-Mu Twin Triode. 9-pin miniature type, with transconductance per triode unit = 10,000 micromhos. Especially useful in cathode-follower circuits of high-speed digital computers.

MECHANO-ELECTRONIC TRANSDUCER

- 5734 Triode type for applications involving the measurement of mechanical vibration. Has a minimum free cantilever resonance of the internal section of the plate shaft of 12,000 cycles per second.

RCA Quick Selection Guide

"PREMIUM" TUBES

For Critical Military and Commercial Applications

Type	Proto- type [▲]	Description	Class
0A2-WA*	0A2	Voltage Regulator	7-Pin Min.
0B2-WA*	0B2	Voltage Regulator	7-Pin Min.
0C2	—	Voltage Regulator	7-Pin Min.
2D21-W*	2D21	Thyratron	7-Pin Min.
6AC7-W*	6AC7	Sharp-Cutoff Pentode	Metal-Octal
6AU6-WA*	6AU6	Sharp-Cutoff Pentode	7-Pin Min.
6J4-WA*	6J4	High-Mu Triode	7-Pin Min.
6J6-WA*	6J6	Medium-Mu Twin Triode	7-Pin Min.
12AT7-WA*	12AT7	High-Mu Twin Triode	9-Pin Min.
5636*	—	Sharp-Cutoff Pentode	Subminiature
5639	—	Sharp-Cutoff Pentode	Subminiature
5654	6AK5	Sharp-Cutoff Pentode	7-Pin Min.
5654/6AK5-W	6AK5	Sharp-Cutoff Pentode	7-Pin Min.
5654/6AK5-W/ 6096	6AK5	Sharp-Cutoff Pentode	7-Pin Min.
5670	2C51	Medium-Mu Twin Triode	9-Pin Min.
5670WA*	2C51	Medium-Mu Twin Triode	9-Pin Min.
5686	—	Beam Power Tube	9-Pin Min.
5718	—	Medium-Mu Triode	Subminiature
5719	—	High-Mu Triode	Subminiature
5725	6AS6	Sharp-Cutoff Pentode	7-Pin Min.
5726	6AL5	Twin Diode	7-Pin Min.
5726/6AL5-W*	6AW5	Twin Diode	7-Pin Min.
5726/6AL5-W/ 6097*	6AL5	Twin Diode	7-Pin Min.
5727	2D21	Thyratron	7-Pin Min.
5727/2D21-W*	2D21	Thyratron	7-Pin Min.
5749	6BA6	Remote-Cutoff Pentode	7-Pin Min.
5749/6BA6-W*	6BA6	Remote-Cutoff Pentode	7-Pin Min.
5750	6BE6	Pentagrid Converter	7-Pin Min.
5751	12AX7	High-Mu Twin Triode	9-Pin Min.
5751-WA*	12AX7	High-Mu Twin Triode	9-Pin Min.
5814-A	12AU7	Medium-Mu Twin Triode	9-Pin Min.
5814-WA*	12AU7	Medium-Mu Twin Triode	9-Pin Min.
5840	—	Sharp-Cutoff Pentode	Subminiature

*Types manufactured to conform to a particular military specification.
 ▲"Premium" types may differ from their prototypes in electrical and/or mechanical characteristics, physical structure, or type of tests to which they are subjected. Tube data should, therefore, be checked before replacing a type in the prototype column with the listed "Premium" type.

RCA Quick Selection Guide

"PREMIUM" TUBES

For Critical Military and Commercial Applications

Type	Proto- type [▲]	Description	Class
5896*	—	Twin Diode	Subminiature
5899	—	Semiremote-Cutoff Pentode	Subminiature
5902*	—	Beam Power Tube	Subminiature
6005	6AQ5	Beam Power Tube	7-Pin Min.
6005/ 6AQ5-W*	6AQ5	Beam Power Tube	7-Pin Min.
6005/ 6AQ5-W/ 6095*	6AQ5	Beam Power Tube	7-Pin Min.
6021	—	Medium-Mu Twin Triode	Subminiature
6072	12AY7	Medium-Mu Twin Triode	9-Pin Min.
6073	OA2	Voltage Regulator	7-Pin Min.
6073/OA2	OA2	Voltage Regulator	7-Pin Min.
6074	OB2	Voltage Regulator	7-Pin Min.
6074/OB2	OB2	Voltage Regulator	7-Pin Min.
6080-WA*	6AS7-G	Low-Mu Twin Power Triode	Glass-Octal
6101	6J6	Medium-Mu Twin Triode	7-Pin Min.
6101/6J6-WA*	6J6	Medium-Mu Twin Triode	7-Pin Min.
6111	—	Medium-Mu Twin Triode	Subminiature
6112*	—	High-Mu Twin Triode	Subminiature
6136	6AU6	Sharp-Cutoff Pentode	7-Pin Min.
6186/ 6AG5-WA*	6AG5	Sharp-Cutoff Pentode	7-Pin Min.
6189/ 12AU7-WA*	12AU7	Medium-Mu Twin Triode	9-Pin Min.
6201	12AT7	High-Mu Twin Triode	9-Pin Min.
6205*	—	Sharp-Cutoff Pentode	Subminiature
6206	—	Semiremote-Cutoff Pentode	Subminiature
6626/ OA2-WA*	OA2-WA	Voltage Regulator	7-Pin Min.

*Types manufactured to conform to a particular military specification.

▲"Premium" types may differ from their prototypes in electrical and/or mechanical characteristics, physical structure, or type of tests to which they are subjected. Tube data should, therefore, be checked before replacing a type in the prototype column with the listed "Premium" type.

RCA Quick Selection Guide

TYPES FOR SPECIAL APPLICATIONS

MINIATURES

- 3A4** Power Pentode. Filament volts, 1.4/2.8. A-F power output of 700 milliwatts.
- 3A5** Medium-Mu Twin Triode. Class C power output of 2 watts at 40 Mc.
- 6AS6** Sharp-cutoff Pentode. 7-pin miniature type. Grids No. 1 and No. 3 can each be used as independent control electrodes. For use in gated amplifier circuits, delay circuits, gain-controlled amplifiers, and mixer circuits.
- 6J4** UHF Amplifier Triode. Cathode-drive amplifier. For frequencies up to 500 Mc.
- 12AY7**—Medium-Mu Twin Triode. 9-pin Miniature Type. For use in the first stages of high-gain audio-frequency amplifiers, where reduction of microphonics, leakage noise, and hum are primary considerations.
- 26A6** Remote-Cutoff Pentode. Remote-cutoff, heater-cathode type. Useful in aircraft receivers operating directly from 12-cell storage batteries.
- 26C6** Twin-Diode—Medium-Mu Triode. Heater-cathode type. Useful in aircraft receivers operating directly from 12-cell storage batteries.
- 26D6** Pentagrid Converter. Heater-cathode type. Useful in aircraft receivers operating directly from 12-cell storage batteries.
- 5879** Sharp-Cutoff Pentode. 9-pin miniature type. Intended for use as an audio amplifier in applications requiring reduced microphonics, leakage noise, and hum. Especially useful in the input stages of medium-gain public address systems, home sound recorders, and general-purpose audio systems.
- 9001** Sharp-Cutoff Pentode. A sharp cut-off pentode for use as an r-f amplifier or detector in u-h-f service.
- 9002** UHF Triode. Useful as a u-h-f detector, amplifier and oscillator.
- 9003** Remote-Cutoff Pentode. Remote cutoff type useful as a mixer or as an r-f or i-f amplifier in u-h-f services.
- 9006** UHF Diode. Heater-cathode type. Resonant frequency, about 700 Mc. For u-h-f service as a rectifier, detector, or measuring device.

RCA Quick Selection Guide

TYPES FOR SPECIAL APPLICATIONS (cont'd)

METAL, GT, AND OTHER GLASS TYPES

- 2C40 Lighthouse Triode. A high frequency amplifier and oscillator for use up to 3000 Mc. Plate dissipation, 6.5 watts max., $\mu = 36$, gm = 4800 micromhos.
- 2C43 Lighthouse Triode. Has the same design features as the 2C40 except for a plate dissipation of 12 watts max., $\mu = 48$, and gm = 8000 micromhos.
- 6AG7-Y—Power Pentode. Similar to type 6AG7 except for micanol base.
- 6AS7-G—Low-Mu Twin Triode. Heater-cathode type. Has high perveance, a μ of 2, and an ac plate resistance of 280 ohms. For use as a regulator tube in dc power supplies, and in projection television booster scanning applications.
- 6SJ7-Y—Triple-Grid Detector Amplifier. Same as type 6SJ7 except for micanol base.
- 12A6 Beam Power Tube. Metal type. Designed particularly for aircraft applications. Heater volts, 12.6. Max. plate volts, 250.
- 12L8GT—Twin-Power Pentode. Heater volts, 12.6. Max. plate volts, 180. Plate dissipation per plate, 2.5 watts. Similar to type 1644.
- 12SW7—Twin-Diode—Medium-Mu Triode. Heater-cathode type. Useful in aircraft receivers.
- 12SX7-GT—Medium-Mu Twin Triode. Heater-cathode type. Useful in aircraft receivers.
- 12SY7—Pentagrid Converter. Single-ended metal type. Useful in aircraft receivers.
- 26A7-GT—Twin Beam Power Tube. Heater volts, 26.5. Max. plate volts, 50. For 12-cell battery service.
- 1609 Amplifier Pentode. For low-microphonic applications. Filament volts, 1.1. Max. plate volts, 135.
- 1612 Pentagrid Amplifier. For low-microphonic applications. Heater volts, 6.3. Max. plate volts, 250. Similar to type 6L7.
- 1620 Triple-Grid Detector Amplifier. For low-microphonic applications. Heater volts, 6.3. Max. plate volts, 250. Similar to type 6J7.
- 1621 Power Amplifier Pentode. Metal type. For application requiring continuity of service. Heater volts, 6.3. In push-pull service: Max. plate volts, 300; a-f power output, 5 watts.

RCA Quick Selection Guide

TYPES FOR SPECIAL APPLICATIONS (cont'd)

METAL, GT, AND OTHER GLASS TYPES (cont'd)

- 1622 Beam Power Tube. Metal type. For applications requiring continuity of service. Heater volts, 6.3. In push-pull service: Max. plate volts, 300 ; power output, 10 watts.
- 1629 Electron-Ray Tube. Indicator type. Similar to type 6E5 except for a 12.6-volt heater and an octal base.
- 1631 Beam Power Amplifier. Metal type. Similar to type 6L6 except for a 12.6-volt heater. Max. plate dissipation, 16 watts.
- 1632 Beam Power Tube. Metal type. Similar to type 25L6 except for 12.6-volt heater, and plate voltage and dissipation ratings.
- 1635 Class B Twin Amplifier. Heater-cathode type. For audio amplifier applications.
- 5642 Diode. Subminiature type with flexible leads for TV high-voltage rectifier applications. Heater volts 1.25. Peak inverse plate voltage 10,000.
- 5687 Medium-Mu Twin Triode. For general purpose amplifier applications. Heater volts 6.3 and 12.6 for parallel and series operation.
- 5881 Beam Power Amplifier. For audio-frequency power amplifier applications. Heater volts, 6.3. In push-pull AB1 service, max. power output, 26.5 watts.
- 5890 Low-current beam pentode of the remote-cutoff type intended particularly for the regulation of high-voltage dc power supplies.
- 6026 Oscillator Triode. Subminiature type intended for transmitting service in radiosonde applications at 400 Mc.
- 6080 Low-Mu Twin Triode. Similar to type 6AS7-G in characteristics, but is smaller in size. Intended for applications critical as to shock and vibration, and requiring reduced susceptibility to electrolysis.
- 6082 Same as 6080 but has 26.5-volt heater. Intended for use in aircraft receivers.

RCA Quick Selection Guide
TUBES FOR
MOBILE COMMUNICATIONS EQUIPMENT

**(Operating from 3- and 6-Cell
Storage-Battery Systems)**

For 6-Cell Storage Battery Systems

Type	Description	Class	Service
7054	Power Pentode	9-Pin Min.	Class C rf power amplifier, oscillator, frequency multiplier up to 40 Mc.
7055	Twin Diode	7-Pin Min.	Detector in am and fm receivers, low-current rectifier, speech clipper
7056	Sharp-Cutoff Pentode	7-Pin Min.	Rf and if amplifier up to 45 Mc.
7057	Medium-Mu Twin Triode	9-Pin Min.	Rf amplifier in cascode-type circuits up to 200 Mc.
7058	High-Mu Twin Triode	9-Pin Min.	Phase inverter, resistance-coupled amplifier, low-frequency oscillator
7059	Medium-Mu Triode—Sharp-Cutoff Pentode	9-Pin Min.	Oscillator and mixer in receivers utilizing if frequencies up to 40 Mc.
7060	Medium-Mu Triode—Power Pentode	9-Pin Min.	Pentode as Class C rf amplifier and frequency multiplier up to 40 Mc.; triode unit, as reactance modulator
7061	Beam Power Tube	9-Pin Min.	Audio-frequency power amplifier

For 3-Cell Storage Battery Systems

6660/ 6BA6	Remote-Cutoff Pentode	7-Pin Min.	Rf amplifier in standard broadcast and fm receiver and in wide-band and high-frequency applications
6661/ 6BH6	Sharp-Cutoff Pentode	7-Pin Min.	Rf amplifier in high-frequency; wide-band applications
6662/ 6BJ6	Remote-Cutoff Pentode	7-Pin Min.	Rf amplifier in high-frequency, wide-band applications
6663/ 6AL5	Twin Diode	7-Pin Min.	Detector in fm receivers, clipper and clamper applications

RCA Quick Selection Guide

For 3-Cell Storage Battery Systems (cont'd)

Type	Description	Class	Service
6669/ 6AQ5-A	Beam Power Tube	7-Pin Min.	Audio-frequency power amplifier
6677/ 6CL6	Power Pentode	9-Pin Min.	Power amplifier
6678/ 6U8-A	Medium-Mu Triode—Sharp- Cutoff Pentode	9-Pin Min.	Oscillator and mixer for very high frequencies
6679/ 12AT7	High-Mu Twin Triode	9-Pin Min.	Grounded-grid amplifier, frequency converter up to 300 Mc.
6680/ 12AU7-A	Medium-Mu Twin Triode	9-Pin Min.	Phase inverter, amplifier, oscillator, multivibrator
6681/ 12AX7	High-Mu Twin Triode	9-Pin Min.	Phase inverter, resistance-coupled amplifier, multivibrator

RCA INTERCHANGEABILITY DIRECTORY OF TUBES FOR COMMUNICATIONS AND INDUSTRY

Direct Replacement Types

RCA types shown below are direct replacements under all circumstances for corresponding types to be replaced.

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
OA3/VR75 OC3/VR105 OD3/VR150 1P29/FJ-401 1P32	OA3 OC3 OD3 1P29 927	BW-11 RK-11 12DP7 FG-17 WL-17	834 1623 12DP7-A 5557 5557
2AP1 2B4 2C38 2C39 2X2/879	2AP1-A 885 2C39-A 2C39-A 2X2-A	RK-20A PJ-23 RK-25 RK-25B RK-28	804 868 802 802 803
3-50G2 3AP1 3BP1 3C45 3D22	834 3AP1-A 3BP1-A 6130/3C45 3D22A	RK-28A CF-30V(C-D) RK-30 CE-31V(C-D) FG-32	803 925 800 919 5558
3X100A11 4-250A 4-250A/6156 4D21 4X250F	2C39-A 4-250A/5D22 6156/4-250A 4-125A/4D21 7204/4X250F	WL-32 RK-33 CE-34 CE-34R RK-39	5558 2C21/1642 934 934 807
5BP1 5C21/C6J 5CP1 5CP7 5O22	5BP1-A C6J/5C21 5CP1-A 5CP7-A 4-250A/5D22	CE-41 CE-42 KU-42 RK-44 RK-47	921 922 6130/3C45 837 814
5FP7 5HP1-A WT-6 6Q5-G 7BP7	5FP7-A 5BP1-A 6L6 884 7BP7-A	UH-50 FG-57 RK-57 WL-57 RK-58	834 5559 805 5559 838
7C24 7JP1 PJ-8 G-9 10Y	5762/7C24 7VP1 5556 868 801-A	CE-59 HY-61/807 CE-91R FG-95 CE-98	5581 807 1P37 5560 5582

RCA Interchangeability Directory

Direct Replacement Types

RCA types shown below are direct replacements under all circumstances for corresponding types to be replaced.

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
FG-104	5561	WT-210-0069	5557
WL-104	5561	WT-210-0070	5550
WT-210-0001	2D21	WT-210-0071	5551
WT-210-0003	884	WT-210-0073	5553
WT-210-0004	2050	WT-210-0074	105
WT-210-0006	6H6	WT-210-0078	172
WT-210-0008	866-A	WT-210-0079	105
WT-210-0009	84/6Z4	WT-210-0081	6SJ7
WT-210-0011	OC3	WT-210-0082	6V6
WT-210-0012	80	WT-210-0083	7K7
WT-210-0013	5Z3	WT-210-0084	6N7
WT-210-0015	5557	WT-210-0084	6N7-GT
WT-210-0018	OD3	WT-210-0085	50B5
WT-210-0019	83	WT-210-0086	833-A
WT-210-0021	6X5	WT-210-0087	6K8
WT-210-0021	6X5-GT	WT-210-0088	6J5
WT-210-0025	117Z6-GT	WT-210-0088	6J5-GT
WT-210-0027	872-A	WT-210-0089	6G6-G
WT-210-0028	3Q5-GT	WT-210-0090	6C6
WT-210-0029	6C5	WT-210-0091	0A4-G
WT-210-0031	902-A	FG-235A	5552-A
WT-210-0037	117L7/M7-GT	FG-238B	5555
WT-210-0038	172	WT-245	884
WT-210-0040	6X4	WT-246	2050
WT-210-0042	5Y3-GT	HK-257(B)	4C27/8001
WT-210-0044	575-A	FG-258-A	5553-B
WT-210-0045	892	WT-261	6H6
WT-210-0048	5U4-G	WT-262	866-A
WT-210-0052	2AP1-A	WT-263	84/6Z4
WT-210-0053	3AP1-A	WT-269	OC3
WT-210-0056	5559	WT-270	80
WT-210-0057	5560	WT-270X	5Z3
WT-210-0058	676	FG-271	5551-A
WT-210-0060	OZ4	WT-272	5557
WT-210-0062	5557	WT-274B	5R4-GY

RCA Interchangeability Directory

Direct Replacement Types

RCA types shown below are direct replacements under all circumstances for corresponding types to be replaced.

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
WT-294	OD3	WT-699	5550
WT-301	83	NL-715	5557
UE-303A	203A	ML-728	5557
WE-304B	834	WL-735	868
F-307A	207	WL-741	923
WT-308	6X5-GT	801	801-A
CE-309	5557	811	811-A
CE-311	3C33	812	812-A
UE-317C	217-C	829	829-B
322A	803	829-A	829-B
331A	805	UE-830	830-B
350A	807	832	832-A
366-A	866-A	833	833-A
WT-377	117Z6-GT	857	857-B
ML-381	2C39-A	866	866-A
WT-389	3Q5-GT	866-A/866	866-A
WT-390	6C5	869-A	869-B
FJ-401	1P29	872	872-A
403-A	5654	872-A/872	872-A
GL-415	5550	T-875-A	575-A
GL-451	8020	879	2X2-A
ZP-572	2C39-A	889	889-A
WT-606	2D21	889-R	889R-A
WL-630	2050	893	893-A
WL-630A	2050	902	902-A
WL-631	5559	UE-905	805
WL-632A	632-B	906-P1	3AP1-A
WL-632B	632-B	908	908-A
KU-634	677	UE-930	830-B
WL-651/656	5552-A	UE-930B	830-B
WL-652/657	5551-A	931	931-A
WL-653B	5555	938	838
WL-655/658	5553-B	UE-945	845
672	672-A	UE-966	866-A
WL-681/686	5550	UE-966-A	866-A

RCA Interchangeability Directory

Direct Replacement Types

RCA types shown below are direct replacements under all circumstances for corresponding types to be replaced.

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
UE-967	5557	GL-5553/ FG-258A	5553-B
UE-972	872-A	5553/655	5553-B
UE-972-A	872-A	5553-A	5553-B
NU-975-A	575-A	5553-B/655	5553-B
NL-1051	5551-A	GL-5555/ FG-238B	5555
NL-1052	5551-A		
NL-1053	5553-B	AX-5555/ 653-B	5555
1640	6405/1640	GL-5556/PJ-8	5556
1701	5557	GL-5557/ FG-17	5557
1802-P1	5BP1-A	WL-5557/17	5557
1811-P1	7CP1	AX-5557/ FG-17/1701	5557
1849	1850-A		
1850	1850-A		
1852	6AC7		
1853	6AB7	5557/715	5557
		GL-5558/ FG-32	5558
1854	6474	WL-5558/32	5558
1855	6895/1855	GL-5559/ FG-57	5559
2051	2050	WL-5559/57	5559
2525A5	5BP1-A		
GL-5550/ GL-415	5550	5560/FG-95	5560
		GL-5561/ FG-104	5561
WL-5550/ 681/686	5550	WL-5561/104	5561
5550/681	5550	WL-5563	5563-A
5551	5551-A	5604	5604-A
AX-5551/652	5551-A		
GL-5551/ FG-271	5551-A	GL-5632	C3J/5632
		GL-5632/C3J	C3J/5632
		5636-A	5636
WL-5551-A/ 652	5551-A	WL-5665	C16J/5665
		GL-5665/C16J	C16J/5665
5552	5552-A		
GL-5552/ FG-235-A	5552-A	WL5685	C6J-A/5685
		5685/C6J	C6J-A/5685
5552/651	5552-A	5719-A	5719
5553	5553-B	5762	5762/7C24
		5814	5814-A

RCA Interchangeability Directory

Direct Replacement Types

RCA types shown below are direct replacements under all circumstances for corresponding types to be replaced.

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Similar RCA Type
5822	5822-A	EL-C6J	C6J/5C21
5897	5718	EL-C6J/A	C6J-A/5685
5898	5719	EL-C16J	C16J/5665
5899-A	5899	WT-T-100	6X4
6014	C1K/6014	WT-T-102	5Y3-GT
GL-6096	5654/6AK5-W/ 6096	WT-T-103	6H6
GL-6097	5726/6AL5-W/ 6097	WT-T-104	575-A
6130	6130/3C45	WT-T-105	892
6155	6155/4-125A	WT-T-111	5559
6156	6156/4-250A	WT-T-112	5560
6474/1854	6474	WT-T-113	676
6626	6626/OA2-WA	WT-T-114	OZ4
6660	6660/6BA6	WT-T-115	117N6-GT
6661	6661/6BH6	WT-T-117	5557
6662	6662/6BJ6	WT-T-118	105
6663	6663/6AL5	WT-T-119	172
6669	6669/6AQ5-A	WT-T-122	6SJ7
6677	6677/6CL6	WT-T-123	6V6
6678	6678/6U8-A	WT-T-124	7K7
6679	6679/12AY7	WT-T-125	6N7-GT
6680	6680/12AU7-A	WT-T-126	50B5
6681	6681/12AX7	WT-T-127	833-A
6810	6810-A	WT-T-128	6K8
8001	4E27/8001	WT-T-129	6J5-GT
8012	8012-A	WT-T-130	6G6-G
8016	1B3-GT/8016	WT-T-131	6C6
8020/100R	8020	WT-T-132	OA4-G
EL-C1K	C1K/6014	WT-T-135	5U4-G
EL-C3J	C3J/5632	WT-T-136	2AP1-A
EL-C3J/A	C3J-A/5684	WT-T-137	3AP1-A
		WT-T-149	172

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
DC3-W	DC3	3X2500A3	5762/7C24
DD3-W	DD3	CE-4-A/B	1P40, 930
CE-1-A/B	918	CE-4-C	1P40, 930
CE-1-C	918	CE-4-D	1P40, 930
CE-1-D	918	4B32	872-A
CE-1V-A/B	917, 919	GL-4C21	8005
CE-1V-C	1P40, 930	4C22	8005
CE-1V-D	1P40, 930	4C25	808
CE-2-A/B	6953	PL-4D21-A	4-125A/4D21
CE-2-C	1P40, 930	4X150G	4X150A
CE-2-D	1P40, 930	CE-5	927
2-1500	8020	5ADP7	5ABP7
2C22	6J5	5ADP11	5ABP11
2C39-B	2C39-A	GL-5C24	8000
GL-2C40-A	2C40	5D24	4-250A/5D22
2C52	6SL7-GT	6AR6	6BG6-G
2E25	2E24	EL-6B	5561
2E30	5618	6C24	5786
3-25A3	809	6D22	4X500A
3-50A4	811-A	6SJ7-WGT	5693
3-75A3	8005	6SL7-WGT	5691
3-100A2	810	F-7C25	5762/7C24
3-250A4	806	F-7C27	5762/7C24
3-450A4	833-A	F-7C30	5762/7C24
3-1000A2	8000	RK-8	800
3-1000A4	810	CE-11V-C	917
3B37	836	CE-11V-D	917
3C21	838	HV-12	806
3C24	1623	RK-12	809
3CX100A5	2C39-A	NL-14	5557

RCA Interchangeability Directory

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
G-14T	920	25T	809
G-15F	927	RK-27	806
DR-17	5557	FG-27A	5559
TT-17	5557	CE-30V-A/B	925
G-17F	1P41	CE-30V-C	925
HV-18	810	CE-30V-D	925
FV-20	8000	30Z	809
T-20	1623	RK-31	830-B
TV-20	810	CE-31V-A/B	919
TZ-20	809	CE-31V-C	919
RK-21	836	CE-31V-D	919
PJ-21	5556	CE-34Q	934
RX-21A	872-A	GL-35T	808
CE-21-A/B	921	EM-35T	811-A
CE-21-C	921	EM-35TG	808
CE-21-D	921	CE-36-A/B	927
CE-22	1P41	CE-36-C	927
PJ-22	917, 919	CE-36-D	927
KU-23	810	RK-36	806
RK-23	802	RK-37	808
CE-23-A/B	923	RK-38	810
CE-23-C	923	HY-40	812-A
CE-23-D	923	T-40	812-A
RK-23A	802	TZ-40	811-A
HK-24-G	1623	HY-40Z	811-A
24-G	808	RK-41	801
CE-25-A/B	927	RK-45	837
CE-25-C	927	RK-46	804
CE-25-D	927	RK-48A	813
HY-25	809	SR-50	917

RCA Interchangeability Directory

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
R-50A	1P41	R-61A	930
50T	8000	R-61AV	925
RK-51	830-B	R-61B	5581
SR-51	926	R-61BV	1P39
HY-51A	830-B	RK-63	806
R-51A	927	SK-63	918
HY-51B	8005	RK-64	807
R-51B	5583	CE-64Q	5583
R-51BV	929	RK-65	4E27/8001
51T	8005	HY-69	1624
HY-51Z	838	V-70D	8005
RK-52	811-A	R-71A	930
SR-53	917	R-71AV	925
53AWB	927	75TH	8005
HK-54	808	FP-85	8020
54-XH	3AP1-A	FP-85A	8020
T-55	8005	R-85A	928
HY-57	812-A	RK-87	814
R-58A	927	CE-91Q	1P37
58AWB	927	UE-100	810
R-59A	918	HF-100	8005
R-59ATV	917	100TH	810
R-59B	1P37	100TL	8000
59D	929	111H	812-A
CE-60	917	HF-120	8005
HF-60	8005	ZB-120	838
HY-60	807	F-123-A	806
SK-60	868	HF-125	8005
T-60	8005	T-125	810
R-60A	920	F-127-A	810

RCA Interchangeability Directory

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
F-129-B	889-A	211	8005
HF-140	8005	211B	8005
143-D	2X2-A	211C	835
GL-146	805	HD-211C	805
TW-150	807	211D	8005
150P	803	211H	8005
150T	806	214E	217E
GL-152	805	217A	80
152TH	806	CE-220	8020
152TL	806	220C	892
HK-154	808	ML-220CA	892
T-155	806	HF-220R	893A-R
C-200	810	Z-225/866-A	866-A
DR-200	806	232C	892
HF-200	806	233	880
T-200	806	241B	833-A
C-201	805	242A	8005
HF-201	8000	242B	8005
HF-201A	810	242C	8005
C-202	805	249A	866-A
203-A	8005	249B	866-A
HD-203-A	805	249C	866-A
HD-203-C	805	HF-250	8000
203-H	8005	250T	806
203-Z	838	250TH	810
205D	801-A	250TL	806
205E	801-A	HK-252	217-C
WT-210-0007	6L6	253	217-C
WT-210-0061	117N7-GT	HK-254	810
WT-210-0067	3C23	254B	865

RCA Interchangeability Directory

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
255A	869-B	UE-311CH	8000
255B	869-B	312A	828
258B	866-A	313C	1C21
260A	860	315A	673
266B	857-B	319A	872-A
266C	857-B	321A	673
267B	872-A	323B	3C23
268A	801-A	327A	810
274A	5R4-GY	327B	810
T-282A	8000	328A	6C6
284A	845	332A	803
284B	845	339A	807
284D	845	341A	891-R
FP-285	835	341AA	891-R
287A	5557	UE-342B	8005
295A	8005	F-343A	892
300	806	348A	1620
WE-301A	83	349A	6F6
CE-302	3C23	C-350	807
(722-A)		350B	807
T-303C	8000	351A	6X5-GT
WE-303U	8000	352A	6R7
304A	204-A	F-353A	872-A
WE-304B	6AK5	HK-354-C	806
CE-305	3C23	HK-354-D	806
CE-306	676	HK-354-E	806
WE-307A	807	HK-354-F	806
310	801-A	ML-356	5771
WE-310A	6C6	ML-356/5771	5771
WE-310B	1620	356A	5771
UE-311	8005		807

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
356B	806	NL-618	5561
357A	833-A	KU-628	5559
F-357A	857-B	NL-635	5561
357B	833-A	HK-654	849
359A	1C21	678	5563-A
F-363A	892	NL-710	676
F-367A	673	NL-714	5557
F-369-B	869-B	WL-734	917
EE-371-B	8020	WL-739	927
F-375A	575-A	WL-741	923
384D	845	T-756	809
393A	3C23	WL-762	1947
394A	627	WL-767	935
395A	5823	WL-773	935
403B	6AK5	WL-775	935
FJ-405	935	UE-812-H	8005
421A	6AS7-G	T-814	806
423A	5651	T-822	810
WL-450	833-A	825	1623
450TH	833-A	C-849A	833-A
WL-460	806	HK-854H	833-A
WL-463	806	F-857A	857-B
468	810	859	893-A
WL-471	8005	861-A	861
WL-473	5762/7C24	863	892
WL-481	8013-A	866-AX	866-A
RH-507	1949	866B	866-A
GL-546	5696	866-JR	816
578	8020	C-872	872-A
NL-615	5558	F-872-B	872-A

RCA Interchangeability Directory

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
DR-873	872-A	GL-5660	12C8
UE-973	5559	GL-5661	12SK7
UE-975A	575-A	GL-5663	5696
NL-1001	5550	5664	3C23
NL-1005	5551-A	5666	889-A
R-1111	1947	5667	889R-A
R-1111-M	1947	5668	892
1230	30	5669	892-R
1258	6130/3C45	5679	7A6
1266	5823	5683	3C23
1267	2A3	EE-5695	816
1280	14C7	5736	5762/7C24
1603	1620, 5879	GL-5741	8020
1654	1X2-A	GL-5743	5556
1702	5563-A	GL-5788	5555
1816-P4	10FP4-A	5812	5763
1816-P4-A	10FP4-A	5838	6X5
1899	2F21	5839	6X5
5331	830-B	5840-A	5840
5332	830-B	GL-5844	6211
5514	811-A	5852	6X5-GT
5516	2E24	5868/AX9902	833-A
ML-5530	5762/7C24	5891	5671
5590/401B	5654	5915-A	5915
5591/403B	5654	F-5917	5762/7C24
5606	892	F-5918	5770
5651	OA3/VR-75	F-5919	5671
5654	6AK5	5930	2A3
GL-5658	880	5931	5U4-GB
GL-5659	12A6	5932	6L6-G

Similar Replacement Types

RCA types shown below are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective tube data or write to Commercial Engineering, Harrison, New Jersey.

Type to be Replaced	Similar RCA Type	Type to be Replaced	Similar RCA Type
5933 5933-WA WL-5934 WL-5936 5976	807 807 579-B 9C21 2K26	6446 6447 6467 CK-6485 6486A	892 892-R 6199 6AH6 6AS6
5992 5993 5998/421 GL-6046 6074	6V6 6X4 6AS7-G 25L6-GT 0B2	GL-6509 GL-6514 6520 6550 ML-6576	5555 5555 6AS7-G 6L6-G 5770
GL-6087 6094 GL-6100/ 6C4-WA 6106 GL-6134	5690 6005/6AQ5-W 6C4 5690 6AC7	6582A 6627 6853 CK-7079 7105	6AK5 6073 5Y3 6111 6080-WA
GL-6135 GL-6137 6140/423A 6202 GL-6265	6C4 6SK7 5651 6X4 6BH6	7136 7193 7244 7245 7318	575-A 6J5 6J6-WA 6J4-WA 5814-A
6291 6292 6336 6337 GL-6346 GL-6347	6199 5819, 2020 6A57-G, 6080 6080-WA 5551-A 5552-A	8014-A AX-9911 EL-C1B EL-C1B/A EL-C1J/A TGRA	5786 6130/3C45 3C23 3C23 3C23 575-A
GL-6348 6365 6384 6385 6394 6445	5553-B 6199 6AR6 5670 6082 892-R	TGRB TVTA TVTB TVTC V-70-D UE-X-22	872-A 892 833-A 889-A 8005 1616

RCA GERMANIUM TRANSISTOR DATA CHART—AUDIO-FREQUENCY TYPES

TYPE	TYPICAL APPLICATION	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS					
			Collector-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	Current Transfer Ratio at 1 Kc	Alpha-Cutoff Frequency Mc	Power Gain db	Noise Factor db

SMALL-SIGNAL AMPLIFIER APPLICATIONS—CLASS A

2N104	Amplifier	A	-30	-50	150	-6	-1	44	0.7	41	6.5
2N105	Amplifier	C	-25	-15	60	-4	-0.7	55	0.75	33.2	7.5
2N175	Amplifier	A	-10	-2	50	-4	-0.5	65	0.85	43	6
2N215	Amplifier	D	-30	-50	150	-6	-1	44	0.7	41	6.5
2N220	Amplifier	D	-10	-2	50	-4	-0.5	65	0.85	43	6
2N331	Amplifier	B	-30	-200	200	-6	-1	50	1.16	44	9
2N405	Driver Amplifier	A	-20	-70	150	-6	-1	35	0.65	43	—
2N406	Driver Amplifier	D	-20	-70	150	-6	-1	35	0.65	43	—
2N591	Driver Amplifier	D	-32	-40	50	-12	-2	70	0.7	41	—
2N1010	Amplifier	D	10	2	50	3.5	3.5	35	2	—	5

See page 143 for transistor footnotes.

RCA GERMANIUM TRANSISTOR DATA CHART—AUDIO-FREQUENCY TYPES

TYPE	TYPICAL APPLICATION	Metal Case (see illus.)	MAXIMUM RATINGS				CHARACTERISTICS				
			Collector-to-Base Volts	Collector Amperes	Transistor Dissipation		DC Collector Volts	DC Collector Ma	DC Current Transfer Ratio	Class B Push-Pull	
					Temperature † °C	Dissipation Watts				Power Gain db	Power Output watts

LARGE-SIGNAL AMPLIFIER APPLICATIONS—CLASSES A & B

2N109	Amplifier	A	-25	-0.07	TA=25	0.15	-1	-50	75	33	0.25
2N176	Power Amplifier	H	-40	-3	TM=80	10	-2	-500	63	35.5♦	2 [▲]
2N217	Amplifier	D	-25	-0.07	TA=25	0.15	-1	-50	75	33	0.25
2N270	Amplifier	F	-25	-0.15	TA=25	0.25	-1	-150	70	32	0.5
2N301	Power Amplifier	H	-40	-3	TM=80	11	-1.5	-1000	70	30	12
2N301-A	Power Amplifier	H	-60	-3	TM=80	11	-1.5	-1000	70	30	12
2N307	Power Amplifier	H	-35	-1	TM=25	10	-1.5	-200	20♦	—	—
2N351	Power Amplifier	H	-40	-3	TM=80	10	-2	-700	65	33.5 [▲]	4 [▲]
2N376	Power Amplifier	H	-40	-3	TM=80	10	-2	-700	78	35 [▲]	4 [▲]
2N407	Amplifier	A	-20	-0.07	TA=25	0.15	-1	-50	75	33	0.25
2N408	Amplifier	D	-20	-0.07	TA=25	0.15	-1	-50	75	33	0.25
2N456	Power Amplifier	H	-40	-5	TM=25	50	-1.5	-2000	52	33.7	13.1
2N457	Power Amplifier	H	-60	-5	TM=25	50	-1.5	-2000	52	33.7	13.1
2N561	Power Amplifier	H	-80	-10	TM=80	13.3	-1.5	-1000	75	27.7	20
2N647	Amplifier	D	25	0.1	TA=25	0.1	1	50	70	66	0.1
2N649	Amplifier	D	20	0.1	TA=25	0.1	1	50	65	66	0.1
2N1014	Power Amplifier	H	-100	-10	TM=80	13.3	-1.5	-1000	75	27.7	20

See page 143 for transistor footnotes.

RCA GERMANIUM TRANSISTOR DATA CHART—RADIO-FREQUENCY TYPES

TYPE	TYPICAL APPLICATION	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS						
			Collector-to-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	Current Transfer Ratio at 1 Kc	Alpha-cutoff Frequency Mc	Power Gain		
										at Frequency Mc	Maximum db	Useful db

CONVERTER, MIXER, OSCILLATOR APPLICATIONS

2N140	Converter	A	-16	-15	80	-9	-0.6	75	10	1	—	32■
2N219	Converter	D	-16	-15	80	-9	-0.6	75	10	1	—	32■
2N371●	Oscillator	G	-20	-10	80	-12	-1	60	30	—	—	—
2N372●	Mixer	G	-20	-10	80	-12	-1	60	30	20	17	12.5
2N374●	Converter	G	-25	-10	80	-12	-1	60	30	1	—	40■
2N411	Converter	A	-13	-15	80	-9	-0.6	75	10	1	—	32■
2N412	Converter	D	-13	-15	80	-9	-0.6	75	10	1	—	32■
2N642	Converter	G	-34	-10	80	-12	-1	60	42	1	50	40■

See page 143 for transistor footnotes.

RCA GERMANIUM TRANSISTOR DATA CHART—RADIO-FREQUENCY TYPES

TYPE	TYPICAL APPLICATION	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS						
			Collector-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	Current Transfer Ratio at 1 Kc	Alpha-cut-off Frequency Mc	Power Gain		
										at Frequency Mc	Maximum db	Useful db

AMPLIFIER APPLICATIONS

2N139	455-Kc Amplifier	A	-16	-15	80	-9	-1	48	6.8	0.455	38	32
2N218	455-Kc Amplifier	D	-16	-15	80	-9	-1	48	6.8	0.455	38	32
2N247●	RF Amplifier	G	-35	-10	80	-9	-1	60	30	1.5	45	30
2N274●	RF Amplifier	E	-35	-10	80	-9	-1	60	30	1.5	45	30
2N370●	RF Amplifier	G	-20	-10	80	-12	-1	60	30	20	17	12.5
2N373●	455-Kc Amplifier	G	-25	-10	80	-12	-1	60	30	0.455	54.5	40
2N384●	RF Amplifier	E	-30	-10	120	-12	-1.5	60	100	50	—	15♦
2N409	455-Kc Amplifier	A	-13	-15	80	-9	-1	48	6.8	0.455	38	32
2N410	455-Kc Amplifier	D	-13	-15	80	-9	-1	48	6.8	0.455	38	32
2N544●	535-1640 Kc Amplifier	G	-18	-10	80	-12	-0.5	60	30	1.5	47.3	30.4
2N640	RF Amplifier	G	-34	-10	80	-12	-1	60	42	1.5	47	25
2N641	IF Amplifier	G	-34	-10	80	-12	-1	60	42	0.455	40	34

See page 143 for transistor footnotes.

RCA GERMANIUM TRANSISTOR DATA CHART—SWITCHING AND COMPUTER TYPES

TYPE	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS				SWITCHING TIME				"On" Collector Current Ma
		Collector-to-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	DC Current Transfer Ratio	Alpha Cutoff Frequency Mc	"Turn-on" Time		"Turn-off" Time		
									Delay μ sec	Rise μ sec	Storage μ sec	Fall μ sec	

LOW-SPEED SWITCHING APPLICATIONS

2N109													
2N217													
2N270													
2N398	B	-105	-100	50	-0.35	-5	60	—	—	—	—	—	—
2N456	H	-40	-3000	50000	-1.5	-2000	52	—	10	90	15	65	-3900
2N457	H	-40	-3000	50000	-1.5	-2000	52	—	10	90	15	65	-3900
2N561	H	-80	-10000	50000	-1.5	-1000	75	—	10	90	15	65	-3900
2N586	F	-45	-250	250	-1	-250	60	—	—	—	—	—	—
2N1014	H	-100	-10000	50000	-1.5	-1000	75	—	10	90	15	65	-3900

For data on these types, see Audio-Frequency Types section

See page 143 for transistor footnotes.

RCA GERMANIUM TRANSISTOR DATA CHART—SWITCHING AND COMPUTER TYPES

TYPE	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS				SWITCHING TIME				"On" Collector Current Ma
		Collector-to-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	DC Current Transfer Ratio	Alpha Cutoff Frequency Mc	"Turn-on" Time		"Turn-off" Time		
									Delay μ sec	Rise μ sec	Storage μ sec	Fall μ sec	

MEDIUM-SPEED SWITCHING APPLICATIONS

2N139													
2N140													
2N218													
2N219													
2N269	D	-25	-100	120	-1.5	-20	40	12	0.05	0.17	0.20	0.12	-24
2N356	B	20	500	100	0.25	100	30	3	0	1	0.3	1	100
2N357	B	20	500	100	0.25	200	30	6	0	0.6	0.3	0.6	200
2N358	B	20	500	100	0.25	300	30	9	0	0.4	0.5	0.6	300
2N404	B	-25	-100	120	-1.5	-20	40	12	0.05	0.17	0.20	0.12	-24
2N578	B	-20	-400	120	-0.3	-400	15	5	0.05	0.85	0.27	0.27	-200
2N579	B	-20	-400	120	-0.3	-400	30	8	0.04	0.36	0.33	0.17	-200
2N581	B	-18	-100	80	-0.3	-20	30	8	0.05	0.20	0.20	0.15	-20
2N583	D	-18	-100	80	-0.3	-20	30	8	0.05	0.20	0.20	0.15	-20
2N585	B	25	200	120	0.2	20	40	5	0.05	0.35	0.25	0.20	20
2N1090	B	25	400	120	0.2	20	50	7	0.05	0.25	0.20	0.15	200
2N1091	B	25	400	120	0.2	20	70	13	0.05	0.20	0.17	0.13	200

For data on these types, see Radio-Frequency Types section

RCA GERMANIUM TRANSISTOR DATA CHART—SWITCHING AND COMPUTER TYPES

TYPE	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS				SWITCHING TIME				
		Collector-to-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	DC Current Transfer Ratio	Alpha Cutoff Frequency Mc	"Turn-on" Time		"Turn-off" Time		"On" Collector Current Ma
									Delay μ sec	Rise μ sec	Storage μ sec	Fall μ sec	

HIGH-SPEED SWITCHING APPLICATIONS

2N247●				<i>For data on these types, see Radio-Frequency Types section</i>									
2N384●				<i>section</i>									
2N274●				<i>section</i>									
2N580	B	-20	-400	120	-0.3	-400	45	15	0.04	0.16	0.29	0.11	-200
2N582	B	-25	-100	120	-0.2	-20	60	18	0.05	0.15	0.17	0.13	-24
2N584	D	-25	-100	120	-0.2	-20	60	18	0.05	0.15	0.17	0.13	-24
2N643	B	-30	-100	100	-7	-5	45	30*	0.01	0.03	0.006	0.03	—
2N644	B	-30	-100	100	-7	-5	45	50*	0.008	0.015	0.004	0.015	—
2N645	B	-30	-100	100	-7	-5	45	70*	0.006	0.01	0.002	0.01	—
2N1300	K	-13	-100	150	-10	-0.3	50	40*	0.14	0.11	0.14	0.11	-10
2N1301	K	-13	-100	150	-10	-0.3	50	60*	0.09	0.07	0.09	0.07	-10

See page 143 for transistor footnotes.

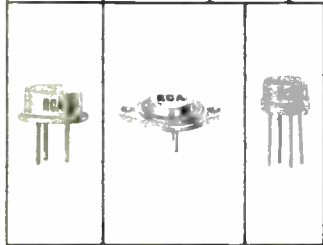
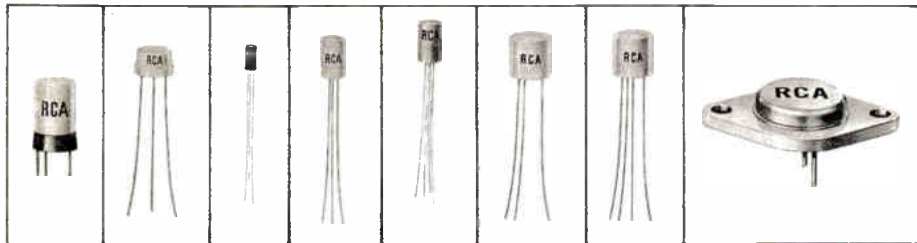
RCA SILICON TRANSISTOR DATA CHART—SWITCHING AND COMPUTER TYPES

TYPE	Metal Case (see illus.)	MAXIMUM RATINGS			CHARACTERISTICS				SWITCHING TIME				"On" Collector Current Ma
		Collector-to-Base Volts	Collector Ma	Transistor Dissipation at 25° C mw	DC Collector Volts	DC Collector Ma	DC Current Transfer Ratio	Alpha Cutoff Frequency Mc	"Turn-on" Time		"Turn-off" Time		
									Delay μ sec	Rise μ sec	Storage μ sec	Fall μ sec	

LOW-SPEED SWITCHING APPLICATIONS

2N1067	I	60	500	5000	4	200	35	1.5	0.2	1.2	0.7	0.9	200
2N1068	I	60	1500	10000	4	750	38	1.5	0.2	1.6	1.0	1.8	750
2N1069	J	60	4000	50000	4	1500	20	1.2	0.2	1.8	0.8	1.4	1500
2N1070	J	60	4000	50000	4	1500	20	1.2	0.2	1.8	0.8	1.4	1500
2N1092	K	60	500	2000	4	200	35	1.5	0.2	1.2	0.7	0.9	200

See page 143 for transistor footnotes.



RCA TRANSISTORS—METAL CASE

◆Drift type. One lead of transistor, connected internally to case, acts as a shield to minimize interlead capacitance and coupling to adjacent circuit components.

■Conversion Power Gain.

♠Minimum value.

‡TA = Ambient temperature.

TM = Mounting-flange temperature.

^Class A.

*Gain-Bandwidth Product.

TRANSISTOR INTERCHANGEABILITY DIRECTORY

For keys to symbols, see pages 159 & 160.

Mfr. Prefix	Type To Be Replaced			Class of Service	Replace by RCA Type*	Similar RCA Type†
	Basic Designation	Mfr.	Description			
	2N34	GTC	GPA	AF Amplifier		2N407
	2N34●	RCA	GPA	AF Amplifier		2N407
	2N34	SYL	GPA	AF Amplifier		2N407
	2N34	TEC	GPA	AF Amplifier		2N407
	2N34A●	RCA	GPA	AF Amplifier		2N407
	2N35●	RCA	GNA	AF Amplifier		2N647
	2N35●	RCA	GNA	AF Amplifier		2N647
	2N36	CBS	GPA	General Use		2N217
	2N36	GTC	GPA	General Use		2N217
	2N37	CBS	GPA	General Use		2N408
	2N37	GTC	GPA	General Use		2N408
	2N37	TEC	GPA	General Use		2N408
	2N38	CBS	GPA	AF Amplifier		2N408
	2N38	GTC	GPA	AF Amplifier		2N408
	2N38	TEC	GPA	AF Amplifier		2N408
	2N38A	CBS	GPA	AF Amplifier		2N408
	2N38A	GTC	GPA	AF Amplifier		2N408
	2N39	GTC	GPA	General Use		2N217
	2N39	NU	GPA	General Use		2N217
	2N39	TEC	GPA	General Use		2N217
	2N40	GTC	GPA	General Use		2N217
	2N40	NU	GPA	General Use		2N217
	2N40	TEC	GPA	General Use		2N217
	2N41●	RCA	GPA	AF Amplifier		2N105
	2N42	GTC	GPA	General Use		2N217
	2N42	NU	GPA	General Use		2N217
	2N42	TEC	GPA	General Use		2N217
	2N43	GE	GPA	AF Amplifier		2N109
	2N43	GTC	GPA	AF Amplifier		2N109
	2N43	TEC	GPA	AF Amplifier		2N109
	2N43A	GTC	GPA	AF Amplifier		2N331
	2N43A	TEC	GPA	AF Amplifier		2N331
	2N44	GE	GPA	AF Amplifier		2N109
	2N44	GTC	GPA	AF Amplifier		2N109
	2N44	TEC	GPA	AF Amplifier		2N109
	2N44A	GE	GPA	AF Amplifier		2N109
	2N45	GE	GPA	AF Amplifier		2N109
	2N45	GTC	GPA	AF Amplifier		2N109
	2N45	TEC	GPA	AF Amplifier		2N109
	2N46●	RCA	GPA	AF Amplifier		2N105

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Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N47	PHL	GPA	AF Amplifier		2N105
	2N48	PHL	GPA	AF Amplifier		2N105
	2N49	PHL	GPA	AF Amplifier		2N105
	2N54	WHE	GPA	AF Amplifier		2N109
	2N55	WHE	GPA	AF Amplifier		2N109
	2N56	WHE	GPA	AF Amplifier		2N109
	2N59	WHL	GPA	AF Amplifier		2N270
	2N60	WHE	GPA	AF Amplifier		2N270
	2N61	WHE	GPA	AF Amplifier		2N270
	2N62	PHL	GPA	General Use		2N109
	2N63	GTC	GPA	AF Amplifier		2N217
	2N63	RK	GPA	AF Amplifier		2N217
	2N63	TEC	GPA	AF Amplifier		2N217
	2N64	GTC	GPA	AF Amplifier		2N217
	2N64	RK	GPA	AF Amplifier		2N217
	2N64	TEC	GPA	AF Amplifier		2N217
	2N65	GTC	GPA	AF Amplifier		2N217
	2N76	GE	GPA	AF Amplifier		2N104
	2N76	TEC	GPA	AF Amplifier		2N104
	2N77●	RCA	GPA	AF Amplifier	2N105	
	2N79●	RCA	GPA	AF Amplifier		2N331
	2N85	TEC	GPA	AF Amplifier		2N109
	2N86	TEC	GPA	AF Amplifier		2N109
	2N87	TEC	GPA	AF Amplifier		2N109
	2N88	TEC	GPA	AF Amplifier		2N105
	2N89	TEC	GPA	AF Amplifier		2N105
	2N90	TEC	GPA	AF Amplifier		2N105
	2N94	SYL	GNA	Switching		2N585
	2N96	RCA	GPA	AF Amplifier●		2N331
	2N104	RCA	GPA	AF Amplifier	2N104	
	2N105	RCA	GPA	AF Amplifier	2N105	
	2N106	RK	GPA	AF Amplifier		2N104
	2N107	GE	GPA	General Use		2N218
	2N109	A	GPA	AF Amplifier	2N109	
	2N109	GTC	GPA	AF Amplifier	2N109	
	2N109	RCA	GPA	AF Amplifier	2N109	
	2N111	CTP	GPA	IF Amplifier		2N218
	2N111	GTC	GPA	IF Amplifier		2N218
	2N111	RK	GPA	IF Amplifier		2N218
	2N111A	RK	GPA	IF Amplifier		2N218

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Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N112	CTP	GPA	IF Amplifier		2N218
	2N112	GTC	GPA	IF Amplifier		2N218
	2N112	RK	GPA	IF Amplifier		2N218
	2N112A	RK	GPA	IF Amplifier		2N218
	2N113	CTP	GPA	IF Amplifier	2N139	
	2N113	GTC	GPA	IF Amplifier	2N139	
	2N113	RK	GPA	IF Amplifier	2N139	
	2N114	GTC	GPA	Converter	2N140	
	2N114	RK	GPA	Converter	2N140	
	2N115	A	GPA	AF Power Ampl	2N140	2N270
	2N116	CBS	GPA	AF Amplifier		2N175
	2N123	GE	GPA	Switching		2N404
	2N125	TI	GNG	Switching		2N585
	2N126	TI	GNG	Switching		2N585
	2N128	PHL	GPS	4-Mc Amplifier		2N247
	2N129	PHL	GPS	455-Kc Ampl		2N373
	2N130	GTC	GPA	AF Amplifier		2N105
	2N130	RK	GPA	AF Amplifier		2N105
	2N130A	RK	GPA	AF Amplifier		2N105
	2N131A	GTC	GPA	AF Amplifier		2N105
	2N132	GTC	GPA	AF Amplifier		2N105
	2N132	RK	GPA	AF Amplifier		2N105
	2N132A	RK	GPA	AF Amplifier		2N105
	2N133	GTC	GPA	AF Amplifier		2N175
	2N133	RK	GPA	AF Amplifier		2N175
	2N133A	RK	GPA	AF Amplifier		2N175
	2N135	GE	GPA	IF-RF Amplifier		2N139
	2N136	GE	GPA	IF-RF Amplifier	2N139	
	2N137	GE	GPA	IF-RF Amplifier	2N140	
	2N138	RK	GPA	AF Amplifier		2N406
	2N138A	RK	GPA	AF Amplifier		2N406
	2N139	RCA	GPA	IF Amplifier	2N139	
	2N140	RCA	GPA	Converter	2N140	
	2N155	CBS	GPA	AF Power Ampl	2N301	
	2N155	SYL	GPA	AF Power Ampl	2N301	
	2N156	CBS	GPA	AF Power Ampl		2N301
	2N157	CBS	GPA	AF Power Ampl		2N561
	2N157A	CBS	GPA	AF Power Ampl		2N1014
	2N167	GE	GNG	Switching		2N1090
	2N173	DEL	GPA	AF Power Ampl		2N301

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Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N175	RCA	GPA	AF Amplifier	2N175	
	2N176	MOT	GPA	AF Power Ampl	2N176	
	2N176	NPC	GPA	AF Power Ampl	2N176	
	2N176	RCA	GPA	AF Power Ampl	2N176	
	2N176	SYL	GPA	AF Power Ampl	2N176	
	2N180	CBS	GPA	General Use		2N217
	2N181	CBS	GPA	General Use		2N270
	2N185	TI	GPA	Switching		2N270
	2N186	GE	GPA	AF Amplifier		2N217
	2N186A	GE	GPA	AF Amplifier		2N270
	2N187	GE	GPA	AF Amplifier		2N109
	2N187A	GE	GPA	AF Amplifier		2N270
	2N188	GE	GPA	AF Amplifier		2N109
	2N188A	GE	GPA	AF Amplifier		2N270
	2N189	GE	GPA	AF Amplifier		2N408
	2N190	GE	GPA	AF Amplifier		2N408
	2N191	GE	GPA	AF Amplifier		2N270
	2N192	GE	GPA	AF Amplifier		2N270
	2N195	TEC	GPA	AF Amplifier		2N217
	2N196	TEC	GPA	AF Amplifier		2N217
	2N197	TEC	GPA	AF Amplifier		2N217
	2N198	TEC	GPA	AF Amplifier		2N217
	2N199	TEC	GPA	AF Amplifier		2N109
	2N200	TEC	GPA	AF Amplifier		2N331
	2N204	TEC	GPA	General Use		2N331
	2N205	TEC	GPA	General Use		2N331
	2N206	RCA	GPA	AF Amplifier	2N331	
	2N207	PHL	GPA	AF Amplifier		2N105
	2N207A	PHL	GPA	AF Amplifier		2N105
	2N207B	PHL	GPA	AF Amplifier		2N105
	2N215	RCA	GPA	AF Amplifier	2N215	
	2N217	RCA	GPA	AF Amplifier	2N217	
	2N218	RCA	GPA	IF Amplifier	2N218	
	2N219	RCA	GPA	Converter	2N219	
	2N220	RCA	GPA	AF Amplifier	2N220	
	2N223	PHL	GPA	AF Amplifier		2N270
	2N224	PHL	GPA	AF Amplifier		2N270
	2N226	PHL	GPA	AF Amplifier		2N270
	2N231	PHL	GPS	455-Kc Ampl		2N218
	2N232	PHL	GPS	455-Kc Ampl		2N218

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Mfr. Prefix	Type To Be Replaced			Class of Service	Replace by RCA Type ^a	Similar RCA Type [†]
	Basic Designation	Mfr.	Description			
	2N234	BEN	GPA	AF Power Ampl	2N301	
	2N234A	BEN	GPA	AF Power Ampl	2N301	
	2N235	BEN	GPA	AF Power Ampl	2N301	
	2N235A	BEN	GPA	AF Power Ampl	2N301	
	2N236A	BEN	GPA	AF Power Ampl		2N301
	2N237	NA	GPA	AF Amplifier		2N220
	2N238	TI	GPA	AF Amplifier		2N217
	2N241	GE	GPA	AF Amplifier		2N217
	2N241A	GE	GPA	AF Amplifier		2N270
	2N242	SYL	GPA	AF Power Ampl	2N301A	
	2N247	RCA	GPD	RF Amplifier	2N247	
	2N247	SYL	GPD	RF Amplifier	2N247	
	2N248	TI	GPG	RF Amplifier		2N247
	2N249	TI	GPA	AF Amplifier		2N270
	2N250	TI	GPA	AF Power Ampl	2N301	
	2N251	TI	GPA	AF Power Ampl	2N301A	
	2N252	TI	GPG	Converter		2N374
	2N253	TI	GNG	455-Kc Ampl		
	2N254	TI	GNG	455-Kc Ampl		
	2N255	CBS	GPA	AF Power Ampl	2N301	
	2N255	SYL	GPA	AF Power Ampl	2N301	
	2N256	CBS	GPA	AF Power Ampl	2N301	
	2N257	CTP	GPA	AF Power Ampl	2N301	
	2N265	GE	GPA	AF Amplifier		2N408
	2N267●	RCA	GPD	RF Amplifier		2N247
	2N268	CTP	GPA	Power Switch		2N301A
	2N269	RCA	GPA	Switching	2N269	
	2N270	RCA	GPA	AF Amplifier	2N270	
	2N271	RK	GPA	Switching		2N404
	2N271A	RK	GPA	Switching		2N404
	2N272	RK	GPA			2N109
	2N273	RK	GPA	AF Amplifier		2N109
	2N274	RCA	GPD	RF Amplifier	2N274	
	2M279	AMP	GPA	AF Amplifier		2N217
	2N280	AMP	GPA	AF Amplifier		2N215
	2N281	AMP	GPA	AF Amplifier		2N217
	2N283	AMP	GPA	AF Amplifier		2N215
	2N285	BEN	GPA	AF Power Ampl		2N301
	2N285A	BEN	GPA	AF Power Ampl		2N301
	2N296	SYL	GPA	AF Power Ampl		2N301A

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Mfr. Prefix	Type To Be Replaced			Class of Service	Replace by RCA Type*	Similar RCA Type†
	Basic Designation	Mfr.	Description			
2N297A	CTP	GPA	AF Power Ampl	2N301 2N301 2N301 2N301A	2N457	
2N301	BEN	GPA	AF Power Ampl			
2N301	RCA	GPA	AF Power Ampl			
2N301	SYL	GPA	AF Power Ampl			
2N301A	RCA	GPA	AF Power Ampl			
2N302	RK	GPA	Switching	2N307 2N307 2N301	2N269 2N269	
2N303	RK	GPA	Switching			
2N307	RCA	GPA	AF Power Ampl			
2N307	SYL	GPA	AF Power Ampl			
2N307A	SYL	GPA	AF Power Ampl			
2N307A	TS	GPA	AF Power Ampl	2N301	2N373 2N373 2N373 2N404	
2N308	TI	GPG	IF Amplifier			
2N309	TI	GPG	IF Amplifier			
2N310	TI	GPG	IF Amplifier			
2N311	GTC	GPA	Switching			
2N311	MOT	GPA	Switching	2N404 2N585 2N585 2N578 2N579		
2N312	GTC	GNA	Switching			
2N312	SYL	GNA	Switching			
2N315	GTC	GPA	Switching			
2N316	GTC	GPA	Switching			
2N317	GTC	GPA	Switching	2N582 2N270 2N270 2N270 2N406		
2N319	GE	GPA	AF Amplifier			
2N320	GE	GPA	AF Amplifier			
2N321	GE	GPA	AF Amplifier			
2N322	GE	GPA	AF Amplifier			
2N323	GE	GPA	AF Amplifier	2N331	2N270 2N407 2N301 2N301	
2N324	GE	GPA	AF Amplifier			
2N325	SYL	GPA	AF Power Ampl			
2N326	SYL	GNA	AF Power Ampl			
2N331	RCA	GPA	AF Amplifier			
2N344	PHL	GPS	Switching	2N274 2N274 2N274 2N274 2N384		
2N344	SPR	GPS	Switching			
2N345	PHL	GPS	IF-RF Ampl			
2N345	SPR	GPS	IF-RF Ampl			
2N346	PHL	GPS	Oscillator			
2N346	SPR	GPS	Oscillator	2N351 2N351 2N351	2N384 2N301	
2N350	MOT	GPA	AF Power Ampl			
2N351	MOT	GPA	AF Power Ampl			
2N351	RCA	GPA	AF Power Ampl			
2N351	SYL	GPA	AF Power Ampl			

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Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N352	PHL	GPA	AF Power Ampl	2N301	
	2N353	PHL	GPA	AF Power Ampl	2N301	
	2N356	CBS	GNA	Switching	2N356	
	2N356	GTC	GNA	Switching	2N356	
	2N356	RCA	GNA	Switching	2N356	
	2N356	SYL	GNA	Switching	2N356	
	2N357	CBS	GNA	Switching	2N357	
	2N357	GTC	GNA	Switching	2N357	
	2N357	RCA	GNA	Switching	2N357	
	2N357	SYL	GNA	Switching	2N357	
	2N358	CBS	GNA	Switching	2N358	
	2N358	GTC	GNA	Switching	2N358	
	2N358	RCA	GNA	Switching	2N358	
	2N358	SYL	GNA	Switching	2N358	
	2N367	TI	GPA	General Use		2N406
	2N368	TI	GPA	General Use		2N215
	2N369	TI	GPA	General Use		2N215
	2N370	RCA	GPD	RF Amplifier	2N370	
	2N370	SYL	GPD	RF Amplifier	2N370	
	2N371	RCA	GPD	Oscillator	2N371	
	2N371	SYL	GPD	Oscillator	2N371	
	2N372	RCA	GPD	Mixer	2N372	
	2N372	SYL	GPD	Mixer	2N372	
	2N373	RCA	GPD	IF Amplifier	2N373	
	2N374	RCA	GPD	Converter	2N374	
	2N375	MOT	GPA	Power Switch		2N561
	2N376	MOT	GPA	AF Power Ampl	2N376	
	2N376	RCA	GPA	AF Power Ampl	2N376	
	2N377	SYL	GNA	Switching		2N357
	2N378	TS	GPA	Power Switch		2N561
	2N379	TS	GPA	Power Switch		2N561
	2N380	TS	GPA	Power Switch		2N561
	2N381	TS	GPA	AF Amplifier		2N270
	2N382	TS	GPA	AF Amplifier		2N270
	2N383	TS	GPA	AF Amplifier		2N270
	2N384	RCA	GPA	VHF Amplifier	2N384	
	2N385	CBS	GNA	Switching		2N357
	2N385	SYL	GNA	Switching		2N357
	2N386	PHL	GPA	AF Power Ampl		2N301A
	2N388	SYL	GNA	Switching		2N357

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Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N394	GE	GPA	Switching	2N398	2N404
	2N395	GE	GPA	Switching		2N581
	2N396	GE	GPA	Switching		2N404
	2N397	GE	GPA	Switching		2N582
	2N398	RCA	GPA	Switching		
	2N399	BEN	GPA	AF Power Ampl		2N456
	2N400	BEN	GPA	AF Power Ampl		2N456
	2N401	BEN	GPA	AF Power Ampl		2N456
	2N402	WHE	GPA	AF Amplifier		2N406
	2N403	WHE	GPA	AF Amplifier		2N215
	2N404	RCA	GPA	Switching	2N404	
	2N404	RK	GPA	Switching	2N404	
	2N404	TS	GPA	Switching	2N404	
	2N405	RCA	GPA	AF Driver	2N405	
	2N406	RCA	GPA	AF Driver	2N406	
	2N407	RCA	GPA	AF Amplifier	2N407	
	2N408	RCA	GPA	AF Amplifier	2N408	
	2N409	RCA	GPA	IF Amplifier	2N409	
	2N410	RCA	GPA	IF Amplifier	2N410	
	2N411	RCA	GPA	Converter	2N411	
	2N412	RCA	GPA	Converter	2N412	
	2N413	RK	GPA	IF Amplifier	2N218	
	2N413	TS	GPA	IF Amplifier	2N218	
	2N413A	RK	GPA	IF Amplifier	2N218	
	2N414	RK	GPA	IF Amplifier	2N218	
	2N414	TS	GPA	IF Amplifier		2N218
	2N414A	RK	GPA	IF Amplifier		2N218
	2N415	RK	GPA	Converter		2N374
	2N415A	RK	GPA	Converter		2N374
	2N416	RK	GPA	RF Amplifier		2N247
	2N416	TS	GPA	RF Amplifier		2N247
	2N417	RK	GPA	RF Amplifier		2N247
	2N417	TS	GPA	RF Amplifier		2N247
	2N418	BEN	GPA	AF Power Ampl		2N301
	2N419	BEN	GPA	Power Switch		2N561
	2N420	BEN	GPA	Power Switch		2N561
	2N420	BEN	GPA	Power Switch		2N561
	2N421	BEN	GPA	Power Switch		2N561
	2N422	RK	GPA	AF Amplifier		2N215
	2N425	RK	GPA	Switching		2N404

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Type To Be Replaced				Class of Service	Replace by RCA Type ^a	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N426	RK	GPA	Switching		2N578
	2N427	RK	GPA	Switching		2N579
	2N428	RK	GPA	Switching		2N580
	2N438A	CBS	GNA	Switching		2N356
	2N439A	CBS	GNA	Switching		2N357
	2N440A	CBS	GNA	Switching		2N358
	2N444	GT	GNA	Switching		2N356
	2N445	GT	GNA	Switching		2N356
	2N446	GT	GNA	Switching		2N357
	2N447	GT	GNA	Switching		2N358
	2N456	RCA	GPA	Power Switch	2N456	
	2N456	TI	GPA	Power Switch	2N456	
	2N457	RCA	GPA	Power Switch	2N457	
	2N457	TI	GPA	Power Switch	2N457	
	2N458	TI	GPA	Power Switch		2N561
	2N460	TS	GPA	AF Amplifier		2N331
	2N461	TS	GPA	AF Amplifier		2N331
	2N464	RK	GPA	AF Amplifier		2N270
	2N465	RK	GPA	AF Amplifier		2N270
	2N466	RK	GPA	AF Amplifier		2N270
	2N481	RK	GPA	RF Amplifier		2N371
	2N482	RK	GPA	IF Amplifier		2N373
	2N483	RK	GPA	IF Amplifier		2N373
	2N484	RK	GPA	IF Amplifier		2N373
	2N485	RK	GPA	RF Amplifier		2N374
	2N486	RK	GPA	RF Amplifier		2N374
	2N499	PHL	GPD	Oscillator		2N371
	2N504	PHL	GPD	IF Amplifier		2N373
	2N518	GE	GPA	Switching		2N404
	2N519	GTC	GPA	Switching		2N578
	2N520	GTC	GPA	Switching		2N578
	2N521	GTC	GPA	Switching		2N579
	2N522	GTC	GPA	Switching		2N580
	2N523	GTC	GPA	Switching		2N643
	2N524	GE	GPA	AF Amplifier		2N586
	2N525	GE	GPA	AF Amplifier		2N586
	2N526	GE	GPA	AF Amplifier		2N586
	2N527	GE	GPA	AF Amplifier		2N586
	2N536	PHL	GPA	Switching		2N578
	2N544	RCA	GPD	RF Amplifier	2N544	

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Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N544	SYL	GPD	RF Amplifier	2N544	
	2N554	MOT	GPA	AF Power Ampl	2N301	
	2N559	WE	GPD	Switching		2N645
	2N561	RCA	GPA	Power Switch	2N561	
	2N576	MH	GPA	Switching		2N585
	2N576A	MH	GPA	Switching		2N585
	2N578	RCA	GPA	Switching	2N578	
	2N578	TS	GPA	Switching	2N578	
	2N579	RCA	GPA	Switching	2N579	
	2N579	TS	GPA	Switching	2N579	
	2N580	RCA	GPA	Switching	2N580	
	2N580	TS	GPA	Switching	2N580	
	2N581	RCA	GPA	Switching	2N581	
	2N581	TS	GPA	Switching	2N581	
	2N582	RCA	GPA	Switching	2N582	
	2N582	TS	GPA	Switching	2N582	
	2N583	RCA	GPA	Switching	2N583	
	2N584	RCA	GPA	Switching	2N584	
	2N585	RCA	GNA	Switching	2N585	
	2N586	RCA	GPA	Switching	2N586	
	2N591	RCA	GPA	AF Driver	2N591	
	2N597	PHL	GPA	Switching		2N578
	2N598	PHL	GPA	Switching		2N579
	2N599	PHL	GPA	Switching		2N580
	2N602	GTC	GPD	Switching		2N643
	2N603	GTC	GPD	Switching		2N644
	2N604	GTC	GPD	Switching		2N645
	2N605	GTC	GPD	General Use		2N384
	2N606	GTC	GPD	General Use		2N384
	2N607	GTC	GPD	General Use		2N384
	2N608	GTC	GPD	General Use		2N384
	2N609	WHE	GPA	Class B Ampl		2N217
	2N610	WHE	GPA	Class B Ampl		2N217
	2N611	WHE	GPA	Class B Ampl		2N217
	2N612	WHE	GPA	Driver Ampl		2N217
	2N613	WHE	GPA	AF Amplifier		2N270
	2N614	WHE	GPA	IF Amplifier		2N373
	2N615	WHE	GPA	IF Amplifier		2N373
	2N617	WHE	GPA	Converter		2N374
	2N618	MOT	GPA	AF Power Ampl		2N561

Transistor Interchangeability Directory

For keys to symbols, see pages 159 & 160.

Mfr. Prefix	Type To Be Replaced			Class of Service	Replace by RCA Type*	Similar RCA Type†
	Basic Designation	Mfr.	Description			
	2N623	TI	GND	Switching		2N645
	2N628	MOT	GPA	AF Power Ampl		2N561
	2N629	MOT	GPA	AF Power Ampl		2N561
	2N630	MOT	GPA	AF Power Ampl		2N1014
	2N631	RK	GPA	AF Amplifier		2N408
	2N632	RK	GPA	AF Amplifier		2N217
	2N633	RK	GPA	AF Amplifier		2N270
	2N635	GE	GNA	Switching		2N1091
	2N636	GE	GNA	Switching		2N1091
	2N637	BEN	GPA	Power Switch		2N561
	2N637A	BEN	GPA	Power Switch		2N561
	2N637B	BEN	GPA	Power Switch		2N561
	2N638	BEN	GPA	Power Switch		2N561
	2N638A	BEN	GPA	Power Switch		2N561
	2N638B	BEN	GPA	Power Switch		2N561
	2N639	BEN	GPA	Power Switch		2N561
	2N639A	BEN	GPA	Power Switch		2N561
	2N639B	BEN	GPA	Power Switch		2N561
	2N640	RCA	GPD	RF Amplifier	2N640	
	2N641	RCA	GPD	IF Amplifier	2N641	
	2N642	RCA	GPD	Converter	2N642	
	2N643	RCA	GPD	Switching	2N643	
	2N644	RCA	GPD	Switching	2N644	
	2N645	RCA	GPD	Switching	2N645	
	2N647	RCA	GNA	AF Amplifier	2N647	
	2N649	RCA	GNA	AF Amplifier	2N649	
	2N659	RK	GPA	Switching		2N578
	2N660	RK	GPA	Switching		2N643
	2N661	RK	GPA	Switching		2N643
	2N662	RK	GPA	Switching		2N579
	2N1010	RCA	GNA	AF Amplifier	2N1010	
	2N1014	RCA	GPA	AF Power Ampl	2N1014	
	2N1017	RK	GPA	Switching		2N582
	2N1021	TI	GPA	Power Switch		2N1014
	2N1022	TI	GPA	Power Switch		2N1014
	2N1038	TI	GPA	Power Switch		2N586
	2N1043	TI	GPA	Power Switch		2N561
	2N1044	TI	GPA	Power Switch		2N561
	2N1045	TI	GPA	Power Switch		2N1014
	2N1058	SYL	GPA	Mixer		2N412

Transistor Interchangeability Directory

For keys to symbols, see pages 159 & 160.

Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	2N1059	SYL	GPA	AF Amplifier		2N270
	2N1067	RCA	SNJ	Power Switch	2N1067	
	2N1068	RCA	SNJ	Power Switch	2N1068	
	2N1069	RCA	SNJ	Power Switch	2N1069	
	2N1070	RCA	SNJ	Power Switch	2N1070	
	2N1090	RCA	GNA	Switching	2N1090	
	2N1091	RCA	GNA	Switching	2N1091	
	2N1092	RCA	SNJ	Power Switch	2N1092	
	2N1101	SYL	GNA	AF Amplifier		2N647
	2N1102	SYL	GNA	AF Amplifier		2N647
	8D	SPR	GPA	AF Amplifier		2N218
	8E	SPR	GPA	AF Amplifier		2N218
	8F	SPR	GPA	AF Amplifier		2N218
	10A	SPR	GPA	AF Amplifier		2N270
	10B	SPR	GPA	AF Amplifier		2N270
	10C	SPR	GPA	AF Amplifier		2N270
CK	13	RK	GPA	RF Amplifier		2N247
ZJ	13	GE	GNG	AF Amplifier		2N217
ZJ	13	GE	GNG	AF Amplifier		2N109
CK	14	RK	GPA	RF Amplifier		2N247
GT	14	GTC	GPA	AF Amplifier		2N217
GT	14H	GTC	GPA	AF Amplifier		2N105
OC	16	AMP	GPA	AF Power Ampl		2N301
CK	17	RK	GPA	RF Amplifier		2N247
GT	20	GTC	GPA	AF Amplifier		2N109
GT	20H	GTC	GPA	AF Amplifier		2N105
MN	24	MOT	GPA	AF Power Ampl		2N301
MN	25	MOT	GPA	AF Power Ampl		2N301
MN	26	MOT	GPA	AF Power Ampl		2N301
T	34A	NU	GPA	AF Amplifier		2N105
T	34B	NU	GPA	AF Amplifier		2N105
T	34C	NU	GPA	AF Amplifier		2N105
T	34D	NU	GPA	AF Amplifier		2N109
T	34E	NU	GPA	AF Amplifier		2N109
T	34F	NU	GPA	AF Amplifier		2N109
GT	38	GTC	GPA	AF Amplifier		2N105
OC	44	AMP	GPA	RF Amplifier		2N247
OC	45	AMP	GPA	RF Amplifier		2N247
OC	65	AMP	GPA	AF Amplifier		2N105
OC	66	AMP	GPA	AF Amplifier		2N105

Transistor Interchangeability Directory

For keys to symbols, see pages 159 & 160.

Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
OC	70	AMP	GPA	AF Amplifier	2N109	2N105
OC	71	AMP	GPA	AF Amplifier		2N105
ZJ	71	GE	GNG	RF Amplifier		2N247
OC	72	AMP	GMA	AF Amplifier		2N109
ZJ	72	GE	GNG	VHF Amplifier		2N247
ZJ	73	GE	GNG	RF Amplifier		2N247
GT	81	GTC	GPA	AF Amplifier		2N109
GT	81H	GTC	GPA	AF Amplifier		2N105
GT	109	GTC	GPA	AF Amplifier		2N269
GT	122	GTC	GPA	Switching		2N269
DR	126	TS	GPA	AF Amplifier	2N301	2N105
DR	128	TS	GPA	AF Amplifier		2N105
TS	161	TS	GMA	AF Amplifier		2N109
TS	162	TS	GPA	General Use		2N104
TS	163	TS	GPA	AF Amplifier		2N104
TS	164	TS	GPA	AF Amplifier		2N104
TS	165	TS	GPA	AF Amplifier		2N109
TS	166	TS	GPA	AF Amplifier		2N175
TS	176	TS	GPA	AF Power Ampl		2N105
TS	206	TI	GNG	AF Amplifier		2N105
GT	222	GTC	GPA	General Use	2N301	2N215
	300	TI	GPA	AF Amplifier		2N217
	301	TI	GPA	AF Amplifier		2N217
	302	TI	GPA	AF Amplifier		2N217
	310	TI	GPA	AF Amplifier		2N217
	350	TI	GPA	AF Amplifier		2N217
	352	TI	GPA	AF Amplifier		2N217
	353	TI	GPA	AF Amplifier		2N217
TS	620	TS	GPA	AF Amplifier		2N139
TS	621	TS	GPA	AF Amplifier		2N140
CK	721	RK	GPA	AF Amplifier	2N139	2N104
CK	722	RK	GPA	AF Amplifier		2N104
CK	725	RK	GPA	AF Amplifier		2N104
CK	727	RK	GPA	AF Amplifier		2N104
CK	751	RK	GPA	AF Amplifier		2N109
CK	759	RK	GPA	RF Amplifier		2N139
GT	759	GTC	GPA	Switching		2N139
CK	760	RK	GPA	RF Amplifier		2N139
GT	760	GT	GPA	455 Kc Ampl		2N139
CK	761	RK	GPA	RF Amplifier		2N139

Transistor Interchangeability Directory

For keys to symbols, see pages 159 & 160.

Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
GT	761	GTC	GPA	455 Kc Ampl	2N139	
CK	762	RK	GPA	Converter	2N140	
GT	762	GTC	GPA	Converter	2N140	
CK	766	RK	GPA	RF Amplifier		2N140
CK	766A	RK	GPA	RF Amplifier		2N140
	830	TI	GNG	Converter		2N140
CK	872	RK	GPA	AF Amplifier		2N407
CK	878	RK	GPA	AF Amplifier		2N270
	1032	CTP	GPA	AF Amplifier		2N109
	1033	CTP	GPA	AF Amplifier		2N109
	1034	CTP	GPA	AF Amplifier		2N109
	1035	CTP	GPA	AF Amplifier		2N109
	1036	CTP	GPA	AF Amplifier		2N109
CTP	1104	CTP	GPA	AF Power Ampl	2N301	
CTP	1109	CTP	GPA	AF Power Ampl	2N301	
CTP	1132	CTP	GPA	AF Power Ampl		2N561
CTP	1135	CTP	GPA	AF Power Ampl		2N561
CTP	1136	CTP	GPA	AF Power Ampl		2N561
	1320	CTP	GPA	AF Amplifier		2N109
	1330	CTP	GPA	AF Amplifier		2N109
	1340	CTP	GPA	AF Amplifier		2N109
	1350	CTP	GPA	AF Amplifier		2N109
	1360	CTP	GPA	AF Amplifier		2N109
	1390	CTP	GPA	IF-RF Ampl		2N139
	1400	CTP	GPA	IF-RF Ampl		2N139
	1410	CTP	GPA	IF-RF Ampl		2N139
	A2	NA	GC	AF Amplifier		2N274
	AO1	PHL	GPS	AF Amplifier		2N218
	AR10	PHL	GPA	AF Power Ampl		2N301
	HA1	CBS	GPA	AF Amplifier		2N105
	HA1	NA	GPA	AF Amplifier		2N105
	HA2	CBS	GPA	AF Amplifier		2N105
	HA3	CBS	GPA	AF Amplifier		2N105
	HA8	CBS	GPA	AF Amplifier		2N105
	HA9	CBS	GPA	AF Amplifier		2N105
	HA10	CBS	GPA	AF Amplifier		2N105
	J1	NA	GPA	AF Amplifier		2N109
	J2	NA	GPA	AF Amplifier		2N109
	J3	NA	GPA	AF Amplifier		2N109
	JP1	NA	GPA	AF Amplifier		2N109

Transistor Interchangeability Directory

For keys to symbols, see pages 159 & 160.

Type To Be Replaced				Class of Service	Replace by RCA Type*	Similar RCA Type†
Mfr. Prefix	Basic Designation	Mfr.	Description			
	L5108	PHL	GPS	RF Amplifier		2N247
	L5121	PHL	GPS	Switching		2N247
	L5122	PHL	GPS	Switching		2N247
	OC32	N	GPA	AF Amplifier		2N109
	OC33	N	GPA	AF Amplifier		2N109
	OC34	N	GPA	AF Amplifier		2N109
	HS3	NA	GPA	Switching		2N269
	HS4	NA	GPA	Switching		2N269
	SB100	PHL	GPS	IF Amplifier		2N247
	SB100	SPR	GPS	IF Amplifier		2N247
	T1040	PHL	GPA	AF Power Ampl	2N301	
	T1041	PHL	GPA	AF Power Ampl	2N301	
	T1164	PHL	GPA	Switching		2N384
	T1166	PHL	GPA	Switching		2N384

MANUFACTURER

KEY TO SYMBOLS IN COLUMN 3

AMP = Amperex	HA = Hughes Aircraft	RR = Radio Receptor
ARA = Advanced Research Associates	MOT = Motorola	SYL = Sylvania
BEN = Bendix	MAL = Mallory	SPR = Sprague
BOG = Bogue	MH = Minneapolis-Honeywell	SRD = Sperry-Rand
CBS = CBS-Hytron	N = Nucleonics	TEC = Transitron
CTP = Clevite	NA = National Aircraft	TI = Texas Instruments
DEL = Delco	NU = National Union	TS = Tung-Sol
FCH = Fairchild	PHL = Philco	WE = Western Electric
GE = General Electric	RCA = Radio Corporation of America	WHE = Westinghouse
GTC = General Transistor	RK = Raytheon	

DESCRIPTION

KEY TO SYMBOLS IN COLUMN 4

GC = Germanium, Point-Contact Type	GNB = Germanium, n-p-n, Bilateral Type
GMA = Germanium, Matched Pair, Alloy-Junction Types	GSN = Germanium-Silicon, n-p-n
GNA = Germanium, n-p-n, Alloy-Junction Type	SND = Silicon, n-p-n, Diffused-Base Type
GND = Germanium, n-p-n, "Drift" or Diffused-Base Type	SNJ = Silicon, n-p-n, Diffused-Junction Type
GNG = Germanium, n-p-n, Grown-Junction Type	SPD = Silicon, p-n-p, Diffused-Base Type
GPA = Germanium, p-n-p, Alloy-Junction Type	SNA = Silicon, n-p-n, Alloy-Junction Type
GPB = Germanium, p-n-p, Bilateral Type	SNG = Silicon, n-p-n, Grown-Junction Type
GPD = Germanium, p-n-p, "Drift" or Diffused-Base Type	SPA = Silicon, p-n-p, Alloy-Junction Type
GPG = Germanium, p-n-p, Grown-Junction Type	SPG = Silicon, p-n-p, Grown-Junction Type
GPS = Germanium, p-n-p, Surface-Barrier Type	SD = Semiconductor Diode

* RCA types shown in this column are direct replacements under all circumstances for corresponding types to be replaced. However, when making a power transistor replacement, the service technician is reminded to readjust the bias potentiometer in accordance with the equipment manufacturer's directions for optimum performance.

† RCA types shown in this column are not directly interchangeable with the types to be replaced because of mechanical and/or electrical differences. For more information as to degree of interchangeability, refer to respective type data or write to Commercial Engineering, RCA, Somerville, N. J.

• RCA has discontinued this type.

Information contained herein has been carefully checked and is believed to be reliable but no responsibility is assumed for inaccuracies. The reporting of errors to Commercial Engineering, RCA, Somerville, N. J., will be appreciated.

RCA SILICON RECTIFIER DATA CHART

Type	Typical Application	Maximum Ratings,* Absolute-Maximum Values For supply frequency of 60 cps						Maximum Reverse Ma at PIV and 25° C	Maximum Diode Dimensions Inchec		Type	
		Peak Inverse Volts	RMS Supply Volts	DC Reverse Volts	DC Forward Ma				Operating Ambient Temperature °C	Length Exclud- ing Leads		Di- ameter
					at 50° C	at 100° C	at 150° C					
IN440-B	Magnetic Amplifiers	100	70	100	750	500	250	165	0.3	.725	.4	IN440-B
IN441-B	Magnetic Amplifiers	200	140	200	750	500	250	165	0.75	.725	.4	IN441-B
IN442-B	Magnetic Amplifiers	300	210	300	750	500	250	165	1.0	.725	.4	IN442-B
IN443-B	Magnetic Amplifiers	400	280	400	750	500	250	165	1.5	.725	.4	IN443-B
IN444-B	Magnetic Amplifiers	500	350	500	650	425	—	150	1.75	.725	.4	IN444-B
IN445-B	Magnetic Amplifiers	600	420	600	650	425	—	150	2.0	.725	.4	IN445-B
IN536	Industrial Power Supplies	50	35	50	750	500	250	165	5	.725	.4	IN536
IN537	Industrial Power Supplies	100	70	100	750	500	250	165	5	.725	.4	IN537
IN538	Industrial Power Supplies	200	140	200	750	500	250	165	5	.725	.4	IN538
IN539	Industrial Power Supplies	300	210	300	750	500	250	165	5	.725	.4	IN539
IN540	Industrial Power Supplies	400	280	400	750	500	250	165	5	.725	.4	IN540
IN547	Industrial Power Supplies	500	350	500	750	500	250	165	5	.725	.4	IN547
IN1095	Industrial Power Supplies	600	420	600	750	500	250	165	5	.725	.4	IN1095
IN1763	Television Power Supplies	400	140	—	500	150	—	100	1	.725	.4	IN1763
IN1764	Television Power Supplies	500	175	—	500	150	—	100	1	.725	.4	IN1764

*Ratings apply with resistive and inductive loads for all types except IN1763 and IN1764. Ratings for these types apply with capacitor input to filter.

RCA RADIO BATTERIES

Type	Volts	Replaces		NEDA [⊙] Type No.	Max. Dimensions Inches		
		Eveready	Burgess		L.	W. or Dia.	Over- all Ht.

PORTABLE "A" TYPES

VS002	4½	746	G3	7	4	1¾	4½/16
VS004	1½	742	4F	4	2¾	2¾	4½/16
VS009	6	744	F4P1	6	2½/16	2½/16	3¾
VS010	6	718	2F4	1	3¾	2½/16	5½
VS034A♦	1½	915	Z	15	—	¾/16	2
VS035A♦	1½	935	1	14	—	1	1½/16
VS036A♦	1½	950	2 or 2R	13	—	1½/32	2½/32
VS065	7½	717	C5	9	2½/32	1½/16	3½/32
VS067	4½	736	F3	3	4	1¾	4½
VS068♦	6	724	Z4	2	1½/32	1½/32	2½/32
VS069	1½	720	2D	18	2¾/16	1¾/16	2¾/32
VS070	1½	960P	8R	23	—	1¾/16	3½/16
VS072	4½	726	D3	19	3½/16	1½/32	2½/16
VS129	7½	713	B5	8	4½	1½/16	3½/16
VS141	1½	W353	2F	11	2½/32	1½/32	4½
VS236♦	1½	964	21R	20	—	1½/32	4½/16
VS315■	7½	707	D5	26	2¾/16	2½/32	2½/16

PORTABLE "B" TYPES

VS012	45	484	B30	207	3½/32	2½/32	5¾/16
VS013	45	482	M30	202	3½/32	1½/32	5½
VS014	45	W359	A30	206	3½	2¾	4¾/16
VS015	22½	738	Z30	205	3	2¾/16	4¾
VS016■	67½	467	XX45	200	2½/16	1¾	3½/32
VS055■	45	455	XX30	201	2½/32	1	3½/16
VS082■	67½	457	K45	203	2½/16	1¾	2½
VS084♦	22½	412	U15	215	1½/32	¾	2
VS086■	45	415	U30	213	1½/16	¾	3½/16
VS090■	90	490	N60	204	3½/32	1¾	3½/32
VS215■	67½	477	P45M	211M	1½/32	1	5¾/16
VS217■	75	437	XX50	212	1½/16	1½/32	6½/32
VS218■	67½	477	P45M	211P	1½/32	1	5¾/16
VS219■	90	479	P45				
VS219■	90	479	P60	214	1½/32	1½/32	7½/32
VS316■	90	495	N60X	216	1½/16	1½/32	7½
VS318■	67½	416	UX45	217	1½/32	1	3½

⊙National Electronic Distributors Association.

♦Flashlight-type terminals.

■2-snap fastener terminals.

RCA RADIO BATTERIES

Type	Volts	Replaces		NEDA [●] Type No.	Max. Dimensions Inches		
		Eve- ready	Mallory		L.	W. or Dia.	Over- all Ht.

TYPES FOR TRANSISTOR APPLICATIONS

VS143 [◆]	1.34	E1	RM1R	—	—	0.625	0.650
VS144 [◆]	1.34	E12	RM12R	—	—	0.640	1.968
VS145 [◆]	1.34	E400	RM400R	—	—	0.455	0.135
VS147 [◆]	1.34	E630	RM630R	—	—	0.615	0.238
VS148 [◆]	2.7	E132	TR132R	—	—	0.662	1.315
VS149 [◆]	4	E133	TR133R	—	—	0.662	1.965
VS163	4	—	TR163	—	0.648	0.662	1.312
VS165 [◆]	6.5	—	TR165R	—	—	0.662	2.217
VS300A	9	—	M1600	1600	—	1	1 ¹⁵ / ₁₆
VS301	3, 6, 9	2506	M1601	1601	8	2 ¹³ / ₁₆	1 ⁹ / ₁₆
VS304	9, 13½	239	M1900	1900	1 ¹¹ / ₃₂	1 ¹ / ₃₂	2 ¹¹ / ₁₆
VS305	9	246	M1602	1602	1 ¹³ / ₃₂	1 ¹¹ / ₃₂	2¾
VS306	9	276	M1603	1603	2 ⁹ / ₁₆	2 ¹ / ₃₂	3 ⁵ / ₃₂
VS309A	9	—	—	1606	—	9 ₁₆	1 ²⁹ / ₃₂
VS312	9	E146	TR146R	1604	1	¾	2
VS313 [◆]	1.4	E9	ZM9	15A	—	0.550	1.968
VS321	4½	2731	—	1303	2 ¹³ / ₁₆	1¾	8 ¹¹ / ₃₂
VS322	9	266	M1605	1605	1 ¹³ / ₁₆	1 ¹³ / ₁₆	2 ⁷ / ₁₆
VS323	9	216	M1604	1604	1 ¹ / ₃₂	1 ¹¹ / ₁₆	1 ²⁹ / ₃₂
VS324	4½	243	M1610	1610	1 ¹³ / ₃₂	1 ¹¹ / ₃₂	2¾
VS334 [◆]	1½	1015	M15R	15	—	9 ₁₆	2
VS335 [◆]	1½	635	M14R	14	—	1	1 ¹⁵ / ₁₆
VS336 [◆]	1½	A100	M13R	—	—	1 ¹¹ / ₃₂	2 ¹³ / ₃₂
VS400	4	E233	TR233R	1300	—	1 ¹ / ₃₂	1 ³¹ / ₃₂

FLASHLIGHT AND LANTERN TYPES

VS034A [◆]	1½	915	Z	15	—	9 ₁₆	2
VS035A [◆]	1½	935	1	14	—	1	1 ¹⁵ / ₁₆
VS036A [◆]	1½	950	2	13	—	1 ¹¹ / ₃₂	2 ¹³ / ₃₂
VS040C	6	509	F4H	908	2 ¹¹ / ₁₆	2 ¹¹ / ₁₆	4 ⁷ / ₁₆
VS040S	6	510S	4FBP	915	2 ¹¹ / ₁₆	2 ¹¹ / ₁₆	4 ⁵ / ₃₂
VS073	1½	904	NE	910	—	0.445	1.180
VS074	1½	912	7	24	—	1 ¹³ / ₃₂	1¾
VS138	3	W357	4F2H	901	3¾	2 ¹¹ / ₁₆	6 ¹ / ₁₆
VS317	6	731	TW1	918	5 ¹¹ / ₃₂	2 ²⁷ / ₃₂	4 ¹⁵ / ₁₆

●National Electronic Distributors Association.

◆Flashlight-type terminals.

RCA RADIO BATTERIES

Type	Volts		Replaces		NEDA [●] Type No.	Max. Dimensions Inches		
	A	B	Ever- ready	Burgess		L.	W. or Dia.	Over- all Ht.

FARM "A-B" AND "B" TYPES

VS022	1½	90	759	17GD60	413	16	4¼	6¼
VS026	—	22½	W365P	2308Pi	717	8½/16	3¾/16	7¾/16
		45						
VS119	7½. 9	90	776	S6D60	415	8¼	4½	13¾

PORTABLE "A-B" PACKS

VS019	7½. 9	90	753	F6A60	401	9¾/32	2¾³/32	4⁵/16
VS047	9	90	752	G6B60	400	14¹/16	2¹¹/16	4¹/16
VS050	6. 7½	75	755	T5Z50	403	8⁹/16	3¾	2⁷/16
VS054	1½	90	W369	6TA60	410	10	2⁵/16	4¹³/16
VS057W	7½. 9	90	756	T6Z60	405	8¾	2¹/8	3²⁵/32
VS058	9	90	757	F6A60P	406	9⁷/32	2¾³/32	4⁷/32
VS059	9	90	727	T6Z60P	428	8¾	2¹/8	3²⁵/32
VS060	7½	75	785	T5Z50P	431	8¾	3⁵/8	2¼
VS064	1½	90	729	4TZ60	425	3²⁷/32	2⁷/32	7¹³/16

●National Electronic Distributors Association.

RCA RADIO BATTERIES

Type	Volts			Replaces		NEDA® Type No.	Max. Dimensions Inches		
	A	B	C	Eveready	Burgess		L.	W. or Dia.	Overall Ht.
INDUSTRIAL AND SPECIAL-PURPOSE TYPES									
VS006C	1½	—	—	6 Gray L	—	906	—	2¾	6¾
VS006S	1½	—	—	61GN	61GN	905	—	2¾	6¾
VS026	—	22½, 45	—	W365P	2308PI	717	8½/16	3¾/16	7½/16
VS028	—	—	—4½	781	5360	714	2½	¾	3½/16
VS029‡	—	—	7½	773	5540	713	3¾	¾	3
VS039	6	—	—	1461	S461	907	10½/32	2¾/32	¾/32
VS040C	6	—	—	509	F4H	908	2½/16	2½/16	4½/16
VS040S	6	—	—	510S	F4BP	915	2½/16	2½/16	4¾/32
VS070	1½	—	—	960P	8R	23	—	1½/16	3½/16
VS083‡	—	15	—	411	U10	208	1½/32	¾	1½/32
VS084‡	—	22½	—	412	U15	215	1½/32	¾	2
VS085‡	—	30	—	413	U20	210	1½/32	¾	2½/16
VS093	—	300	—	493	U200	722	2½/16	2½/32	3¾/32
VS100	3	—	—	W352	F2BP	701	2½/16	1¾	4½/16
VS101	1½	—	—	W354	2FBP	700	2½/16	1¾	4½/16
VS102	—	22½	—	763	4156	710	3½	2¾/32	2½/16
VS103	6	—	—	706	4F4H	902	8½/16	2½/16	6½/16
VS106	1½	—	—	735	4FH	900	2½/16	2½/16	4½/16
VS112	—	45	—	762S	5308	709	4¾	2½/16	5½
VS114	—	45	—	W350	Z30NX	711	3	1¾/32	5¾/32
VS126	—	45	—	W365F	2308SC	723	8¾	3¼	7½/16
VS127W*	—	45	—	W363F	10308SC	724	8½/16	4¾	7¾
VS130	—	—	—4½	761T	2370ST	712	3½/32	1½/32	3½/16
VS131*	—	—	—22½	778	5156SC	708	4¾	2½/16	3½/16
VS132	9	—	—	—	DGBP	909	4½/16	2½/16	3
VS133	4½	—	—	703	532	706	2½	¾	2½/16
VS134	3	—	—	750	422	704	1¾/16	¾	2½/16
VS136	3	—	—	W356	2F2H	703	2½/16	2½/16	4½
VS138	3	—	—	W357	4F2H	901	3¾	2½/16	6½/16
VS139	7½	—	—	715	4F5H	903	7¾	4½/16	6¾/16
VS140*	9	—	—	716	4F6H	904	8½	4½/16	6¾/16
VS142*	4½	—	—	751	432	705	2	¾	2½/16
VS143‡	1.34	—	—	E1	—	—	—	0.625	0.650
VS144‡	1.34	—	—	E12	—	—	—	0.640	1.968
VS145‡	1.34	—	—	E400	—	—	—	0.455	0.135
VS147‡	1.34	—	—	E630	—	—	—	0.615	0.238
VS148‡	2.7	—	—	E132	—	—	—	0.662	1.315
VS149‡	4	—	—	E133	—	—	—	0.662	1.965
VS157W*	—	45	—	W364F	21308SC	—	8½	4¾	7½/16
VS317	6	—	—	731	TW1	918	5½/32	2¾/32	4½/16

*National Electronic Distributors Association.

‡Wax coated.

°Voltage taps at 1½ and 3 volts.

‡Flashlight-type terminals.

‡Voltage taps at 1½, 3, 4½, and 6 volts.

RCA BATTERY INTERCHANGEABILITY DIRECTORY

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
Burgess			
A30	VS014	Z	VS034A
B5	VS129	Z4	VS068
B30	VS012	Z30	VS015
C5	VS065	Z30NX	VS114
D3	VS072	1	VS035A
D5	VS315	2, 2R	VS036A
D6	VS306	2D	VS069
D6BP	VS132	2F	VS141
D6P1	VS301	2F2H	VS136
F2BP	VS100	2F4	VS010
F3	VS067	2FBP	VS101
F4BP	VS040S	2N6	VS305
F4H	VS040C	2R	VS036A
F4P1	VS009	2U6	VS323
F6A60	VS019	2Z3	VS324
F6A60P	VS058	4F	VS004
G3	VS002	4F2H	VS138
G6B60	VS047	4F4H	VS103
K45	VS082	4F5H	VS139
M6	VS322	4F6H	VS140
M30	VS013	4FH	VS106
N	VS073	4FP1	VS009
N60	VS090	4TZ60	VS064
N60X	VS316	6 Ign.	VS006S
P6, P6M	VS300A	6 Tel.	VS006C
P42	VS218	6YT60	VS054
P45	VS218	7	VS074
P45M	VS215	8R	VS070
P60	VS219	9R	VS334
S461	VS039	17GD60	VS022
S6D60	VS119	21R	VS236
T5Z50	VS050	130	VS335
T5Z50P	VS060	230	VS336
T6Z60	VS057W	422	VS134
T6Z60P	VS059	432	VS142
TW1	VS317	532	VS133
U10	VS083	930	VS334
U15	VS084	2156	VS137
U20	VS085	2308Pi	VS026
U30	VS086	2308C	VS126
U200	VS093	2370ST	VS130
UX45	VS318	4156	VS102
XX9	VS304	5156SC	VS131
XX30	VS055	5308	VS112
XX45	VS016	5360	VS028
XX50	VS217	5540	VS029
		10308SC	VS127W

RCA Battery Interchangeability Directory

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
Eveready		727	VS059
		729	VS064
6 "Gray Label"	VS006S	731	VS317
6 "Ignitor"	VS006C	735	VS106
A100	VS336	736	VS067
216	VS323		
226	VS300A	738	VS015
		742	VS004
239	VS304	744	VS009
243	VS324	746	VS002
246	VS305	750	VS134
266	VS322		
276	VS306	751	VS142
		752	VS047
411	VS083	753	VS019
412	VS084	755	VS050
413	VS085	756	VS057W
415	VS086		
416	VS318	757	VS058
		759	VS022
437	VS217	761T	VS130
455	VS055	762S	VS112
457	VS082	763	VS102
467	VS016		
477	VS218	766T	VS137
		773	VS029
479	VS219	776	VS119
482	VS013	778	VS131
484	VS012	781	VS028
490	VS090		
493	VS093	785	VS060
		904	VS073
495	VS316	912	VS074
509	VS040C	915	VS034A
510S	VS040S	935	VS035A
635	VS335		
703	VS133	950	VS036A
		960P	VS070
706	VS103	964	VS236
707	VS315	1015	VS334
713	VS129	1461	VS039
715	VS139		
716	VS140	2506	VS301
		2731	VS321
717	VS065	A100	VS336
718	VS010	E1	VS143
720	VS069	E9	VS313
724	VS068		
726	VS072	E12	VS144

RCA Battery Interchangeability Directory

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
Eveready (cont'd)		Mallory (cont'd)	
E132	VS148	M-19	VS072
E133	VS149	M-20	VS236
E146	VS312	M-23	VS070
E177	VS309A	M-24F	VS074
E233	VS400	M-26	VS315
E400	VS145	M-177	VS309A
E625	VS147	M-200	VS016
E630	VS147	M-201	VS055
W350	VS114	M-202	VS013
W352	VS100	M-203	VS082
W353	VS141	M-204	VS090
W354	VS101	M-205	VS015
W356	VS136	M-206	VS014
W357	VS138	M-207	VS012
W359	VS014	M-208	VS083
W363F	127W	M-210	VS085
W365F	VS126	M-211M	VS215, VS218
W365P	VS026	M-211P	VS215, VS218
W369	VS054	M-212	VS217
		M-213	VS086
		M-214	VS219
		M-215	VS084
		M-216	VS316
		M-217	VS318
		M-400	VS047
		M-401	VS019
		M-403	VS050
		M-405	VS057W
		M-406	VS058
		M-410	VS054
		M-413	VS022
		M-415	VS119
		M-425	VS064
		M-428	VS059
		M-431	VS060
		M-700	VS101
		M-701	VS100
		M-703	VS136
		M-704	VS134
		M-705	VS142
Mallory			
M-1	VS010		
M-2	VS068		
M-3	VS067		
M-4	VS004		
M-6	VS009		
M-7	VS002		
M-8	VS129		
M-9	VS065		
M-11	VS141		
M-13F	VS036A		
M-13R	VS336		
M-13X	VS036A		
M-14F	VS035A		
M-14R	VS335		
M-15F	VS034A		
M-15R	VS334		
M-18	VS069		

RCA Battery Interchangeability Directory

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
Mallory (cont'd)		Mallory (cont'd)	
M-706	VS133	RM-625R	VS147
M-708	VS131	RM-630R	VS147
M-709	VS112	TR-132R	VS148
M-710	VS102	TR-133R	VS149
M-711	VS114		
M-712	VS130	TR-146R	VS312
M-713	VS029	TR-233R	VS400
M-714	VS028	TR-246R	VS305
M-716	VS127W	ZM-9	VS313
M-717	VS026		
M-722	VS093	Ray-O-Vac	
M-723	VS126	A1	VS010
M-900	VS106	A2	VS068
M-901	VS138	A3	VS067
M-902	VS103	A4	VS004
M-903	VS139	A6	VS009
M-904	VS140	A7	VS002
M-905	VS006S	A210	VS085
M-906	VS336	A400	VS047
M-907	VS039	A710	VS102
M-908	VS040C	A716	VS127W
M-910F	VS073	1LP	VS035A
M-914	VS006C	2LP	VS036A
M-915	VS040S	3LP	VS036A
M-918	VS317	5LP	VS036A
M-1600	VS300A	6 Tel. C	VS006C
M-1601	VS301	6 Ign. S	VS006S
M-1602	VS305	7LP	VS034A
M-1603	VS306	7R	VS034A
M-1604	VS312	8	VS129
M-1605	VS322	9	VS065
M-1610	VS324	11	VS141
M-1900	VS304	12	VS005
RM-1R	VS143	18	VS069
RM-12R	VS144	19	VS072
RM-400R	VS145	20	VS236
RM-411R	VS083	23	VS070
RM-412R	VS084	26	VS315
RM-413R	VS085	200	VS016
RM-415R	VS086	201	VS055
		202	VS013

RCA Battery Interchangeability Directory

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
Ray-O-Vac (cont'd)		Ray-O-Vac (cont'd)	
203	VS082	724	VS127W
204	VS090	900	VS106
205	VS015	901	VS138
206	VS014	902	VS103
207	VS012	903	VS139
208	VS083	904	VS140
211M	VS215, VS218	909	VS132
211P	VS215, VS218	918	VS317
212	VS217	941C	VS040C
213	VS086	941S	VS040S
214	VS219	1601	VS301
215	VS084	1602	VS305
400	VS047	1603	VS306
401	VS019	1604	VS323
403	VS050	1606	VS309A
405	VS057W	1900	VS304
406	VS058		
410	VS054	Sears (Homart)	
413	VS022	4553	VS034A
415	VS119	4650	VS036A
425	VS064	4653	VS034A
428	VS059	4656	VS074
431	VS060	4659	VS035A
641	VS039		
700	VS101	4700	VS039
701	VS100	4701	VS006S
703	VS136	4702	VS040C
704	VS134	5005	VS130
705	VS142	6197	VS070
706	VS133		
708	VS131	6306	VS022
709	VS112	6312	VS022
711	VS114	6361	VS127W
712	VS130	6362	VS026
713	VS029	6363	VS026
714	VS028	6363	VS029
716	VS026	6390	VS131
717	VS026	6401	VS047
722	VS093	6407	VS019
723	VS126	6408	VS050
		6409	VS057W

RCA Battery Interchangeability Directory

Type to be Replaced	Replace by RCA Type	Type to be Replaced	Replace by RCA Type
Sears (cont'd)			
6410	VS058	6445	VS336
6418	VS300A	6451	VS009
6419	VS306	6461	VS013
6420	VS301	6465	VS090
		6470	VS219
6430	VS004		
6440	VS002	6480	VS016
6441	VS067	6482	VS215
6442	VS236	6482	VS218
6444	VS065	6485	VS086
		8160	VS070
		8212	VS084
		8255	VS055

RCA SERVICE PARTS

RCA ACCESSORIES FOR INSTALLATION AND SERVICING

Type No.	Description
202W1	Record-Player Selector. Selects either of two record players for use with a single amplifier.
205W1	Degaussing Coil. For removing residual magnetism in metal parts of a TV receiver.
206P1	High-Voltage Interlock Plug. Permits operation of the RCA 600 series receivers with the cabinet back removed.
211A1	Antenna Guy Ring.
220X1	Picture-Tube-Socket Extension Cable (For 600 and 700 Series color TV receivers.)
221X1	Deflecting-Yoke Extension Cable (For 600 and 700 Series color TV receivers.)
222X1	Converging-Magnet Assembly Extension Cable (For 600 Series color TV receivers.)
223X1	High-Voltage Extension Cable (For 600 Series color TV receivers.)
224X1	Converging-Magnet Assembly Extension Cable (For 700 Series color TV receivers.)
225X1	High-Voltage Extension Cable (For 700 Series color TV receivers.)
226X1	Color Convergence Grid Shunt. Permits individual color convergence and matrix adjustments.
227A1	Antenna Mast Mounting. Brackets for mounting TV-receiver antenna masts up to 1½" O.D.
227X1	Kinescope-Socket Extension Cable. For 110° black-and-white picture tubes.
228X1	Deflection-Yoke Extension Cable. (For use with 800 and 800M Series color TV receivers.)
229X1	Deflection-Yoke Extension Cable. For 110° black-and-white TV receivers in which the yoke leads are soldered to the yoke.
240X1	Record Player Switch. For operation of record player through radios that do not have a phono input.

RCA SERVICE PARTS

RCA LIGHTNING ARRESTERS AND TV SET COUPLERS



214X1

TYPE 214X1 VHF

- Easily mounted on any indoor water pipe
- Accommodates standard 300-ohm twin-lead
- No stripping of insulation—cutting or soldering of line required

TYPE 215X1 VHF

- Wood screw firmly secured in body of arrester
- No special tools needed for direct mounting on wood
- May be installed on brick, stone, or cement surfaces
- Accommodates standard 300-ohm twin-lead



234A1

TYPE 234A1 UHF

- No special tools needed for direct mounting on wood
- Accommodates all popular-type UHF transmission lines
- Ultra-low loss

TYPE 235A1 UHF

- Easily mounted on any indoor water pipe
- Accommodates all popular-type UHF transmission lines
- No stripping of insulation—cutting or soldering of line required
- Ultra-low loss



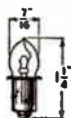
240A1

RCA TV SET COUPLER TYPE 240A1

- Couples two TV sets to same antenna
- Accommodates 300-ohm ribbon-type line
- Reduces oscillator radiation between sets
- Simple to install—self-contained wood screw

RCA SERVICE PARTS RCA MINIATURE LAMPS

TYPE NO.	VOLTS	AMPS	BULB	BASE	BEAD COLOR
FLASHLIGHT					
PR-2	2.4	0.5	B-3½	Min. Flg.	Blue
PR-3	3.6	0.5	B-3½	Min. Flg.	Green
PR-6	2.5	0.3	B-3½	Min. Flg.	Brown
13	3.8	0.3	G-3½	Min. Scr.	Green
14	2.5	0.3	G-3½	Min. Scr.	Blue
112	1.1	0.22	TL-3	Min. Scr.	Pink
222	2.2	0.25	TL-3	Min. Scr.	White
233	2.3	0.27	G-3½	Min. Scr.	Purple
RADIO PANEL AND MISCELLANEOUS					
40	6.8	0.15	T-3¼	Min. Scr.	Brown
41	2.5	0.5	T-3¼	Min. Scr.	White
42	3.2	0.5	T-3¼	Min. Scr.	Green
43	2.5	0.5	T-3¼	Min. Bay.	White
44	6-8	0.25	T-3¼	Min. Bay.	Blue
45	3.2	0.5	T-3¼	Min. Bay.	Green
46	6-8	0.25	T-3¼	Min. Scr.	Blue
47	6-8	0.15	T-3¼	Min. Bay.	Brown
48	2.0	0.06	T-3¼	Min. Scr.	Pink
49	2.0	0.06	T-3¼	Min. Bay.	Pink
50	6-8	0.2	G-3½	Min. Scr.	White
51	6-8	0.2	G-3½	Min. Bay.	White
55	6-8	0.4	G-4½	Min. Bay.	White
291	2.9	0.17	T-3¼	Min. Bay.	White
292	2.9	0.17	T-3¼	Min. Scr.	White
1490	3.2	0.16	T-3¼	Min. Bay.	White
1891	12-16	2 C.P.	T-3¼	Min. Bay.	
1892	14	1 C.P.	T-3¼	S.C. Bay.	



B-3½ Bulb
Min. Flange Base



TL-3 Bulb
Min. Screw Base

G-3½ Bulb
Min. Screw Base



T-3¼ Bulb
Min. Screw Base



G-3½ Bulb
Min. Bayonet Base

G-4½ Bulb
Min. Bayonet Base



T-3¼ Bulb
Min. Bayonet Base

RCA Sound Tape and Audio Devices

WIDE VARIETY OF GRADES AND TYPES

RCA offers a wide variety of Magnetic Recording Sound Tape to meet your needs.

Professional Grade

Professional Grade RCA Magnetic Recording Sound Tape is designed to provide high-quality recordings under extremely difficult conditions. Tough and durable, professional-grade tape is available in 1½-mil thickness only on either acetate or "Mylar" base. Reel size, tape length, and base material are identified by the following type numbers:

ACETATE (PLASTIC) BASE

RCA Type	Reel Diameter (inches)	Tape Length (feet)
262C1	3	150
284C1	5	600
285C1	7	1200
265C1	—	2400
266C1	10½	2400
267C1	10½	2400
268C1	10½	2400

MYLAR* (POLYESTER) BASE

RCA Type	Reel Diameter (inches)	Tape Length (feet)
254C1	5	600
259C1	7	1200
280C1	—	2400
281C1	10½	2400
283C1	10½	2400
282C1	10½	2400

Long-Play

Long-Play RCA Magnetic Recording Sound Tape is designed to provide longer recording time on either "Mylar" or acetate base than Professional-Grade and has the same high quality recording characteristics. Long-Play tape is 1-mil thick. Reel size, tape length, and base material are identified by the following type numbers:

ACETATE (PLASTIC) BASE

RCA Type	Reel Diameter (inches)	Tape Length (feet)
250C1	5	900
255C1	7	1800
269C1	—	3600
270C1	10½	3600
272C1	10½	3600
271C1	10½	3600

MYLAR* (POLYESTER) BASE

RCA Type	Reel Diameter (inches)	Tape Length (feet)
263C1	3	225
253C1	5	900
258C1	7	1800
276C1	—	3600
277C1	10½	3600
279C1	10½	3600
278C1	10½	3600

*DuPont Registered Trade Mark

RCA SOUND TAPE AND AUDIO DEVICES

Extra-Long-Play

Extra-Long-Play RCA Magnetic Recording Sound Tape is designed to provide extra-long running time. On 7" reels, running time is up to 4 hours on dual-track recordings. Extra-Long-Play tape is available on either 1/2-mil Mylar, or 3/4-mil Tensilized Mylar, which has twice the tensile strength of 1/2-mil Mylar.

MYLAR (POLYESTER) BASE

RCA Type	Reel Diameter (inches)	Tape Length (feet)
252C1	5	1200
257C1	7	2400

TENSILIZED MYLAR BASE

RCA Type	Reel Diameter (inches)	Tape Length (feet)
260C1	5	1200
261C1	7	2400
273C1	10 1/2	4800
275C1	10 1/2	4800
274C1	10 1/2	4800

Snap-Load Cartridge

Pre-threaded, magazine-loaded tape cartridge. 264C1—560 ft. of Mylar base tape in snap-load cartridge.

TAPE ACCESSORIES

RCA Type	Description
501C1	5-Reel Tape Chest for 5" Reels
502C1	5-Reel Tape Chest for 7" Reels
503C1	5" Load-Easy Reel with Box
504C1	7" Load-Easy Reel with Box
505C1	Leader & Timing Tape
506C1	5" Standard Reel with Box
507C1	7" Standard Reel with Box
508C1	5" Empty Box
509C1	7" Empty Box
510C1	Empty Box for Snap-Load Cartridge
STSD-4	Deluxe Tape Splicer

RCA TEST INSTRUMENTS

for servicing • production • research

RCA TEST AND MEASURING EQUIPMENT

**WV-77E
VoltOhmyst®
and
WV-77E(K)
VoltOhmyst Kit**



Here's the new addition to the world-famed RCA Volt-Ohmyst Family! Available as a kit or as a completely wired, factory-calibrated instrument. Features flat frequency response $\pm 5\%$ from 40 cps to 5 Mc on the 1.5, 5, and 15-volt rms ranges and the 4, 14, and 40-volt peak-to-peak ranges. Measures dc from 0.02 volt to 1500 volts, rms ac from 0.2 volt to 4000 volts, and resistance from 0.2 ohm to 1000 megohms—all in seven overlapping ranges. Full scale accuracy $\pm 3\%$ on dc and $\pm 5\%$ on ac. Meter is electronically protected against burnout. Separate scales are provided for low ac measurements. Input resistance is standard 11 megohms. W $5\frac{3}{8}$ "", H $7\frac{1}{4}$ "", D $4\frac{1}{2}$ ""; Weight 5 lbs. Also features sleeve on handle for storing probes and cables; fuse in ohms circuit prevents accidental burnout; new circuit minimizes effect of residual gas in bridge tube; color-coded scales for easier, faster readings; ultra-slim probes and extra-flexible cables.

RCA Test Instruments

WV-38A Volt-Ohm-Milliammeter and WV-38A(K) Volt-Ohm- Milliammeter Kit



Exclusive with the new RCA WV-38A VOM are the special ranges for transistor servicing—extra 0.25-volt and 1-volt ranges—and new spring clips on handle to accommodate probes and test leads for extra carrying convenience. The new instrument has these popular features: ohms-divider network fuse-protected; easy-to-read scales; polarity reversal switch; excellent frequency response; full-wave bridge rectifier; standard dbm ranges; plus modern styling! W 5 $\frac{1}{4}$ " x H 6 $\frac{3}{8}$ " x D 3 $\frac{1}{8}$ ".

WR-49B RF Signal Generator



For alignment and signal tracing of AM/FM receivers, low-frequency signal tracing and alignment of TV vf/af amplifiers. Six ranges—85 Kc to 30 Mc. Internal 400 cps modulation. Low rf signal leakage! DC blocking capacitors at rf and af output terminals prevent damage to instrument or external

circuits. Shielded cable for rf and af output included. W 10 $\frac{1}{2}$ " x H 7" x D 6".

RCA Test Instruments WV-98A Senior VoltOhmyst®



For making accurate ac and dc voltage measurements as well as measuring resistances from 0 to 1,000 megohms. Measures peak-to-peak values of complex waveforms. Ruggedized die-cast aluminum case. Large, easy-to-read 6½-inch meter! A fine VTVM for electronics technicians and engineers. Includes special dc/ac-ohms shielded probe and cable. W 7" x H 6½" x D 3¾".

WR-46B Video Dot/Crosshatch Generator



A "must" for making color-TV static and dynamic convergence adjustments in the home, shop or lab. Derives sync from station-tuned TV set and reinserts highly stable video dot, bar, or crosshatch patterns to picture tube grids or video amplifier grids. Pattern independent of receiver rf/if

response. Output cables dc isolated. Video output of 45 volts across 4000 ohms. Vertical bars continuously adjustable from 10 to 25 (approximately) bars. Reversible video output polarity. W 13½" x H 10" x D 8".

RCA Test Instruments

WR-61B Color-Bar Generator



For checking overall operation of color-TV receivers and a "must" for adjusting and troubleshooting color phasing and matrixing circuits. Generates signals for producing 10 bars of different colors simultaneously. Amplitude of color subcarrier and color-burst signal adjustable from front-panel for

checking color sync-lock action of set. Both rf and video output available—video output available—video output has both "+" and "-" polarity. RF output at least 0.01-volt peak-to-peak; video output at least 0.25-volt peak-to-peak across 75 ohms; 8 volts peak-to-peak at HI video output. W 13½" x H 10" x D 7½".

WR-69A Television/FM Sweep Generator



For visual alignment and trouble-shooting of TV rf/lf/vf circuits and other electronic equipment. IF/video frequency ranges 50 Kc to 50 Mc, TV channels 2 to 13, plus FM range—88-108 Mc. Sweep width 0-12 Mc or more. Attenuation ratio 60 db or more below maximum output. All cables included with instrument. W 13⅝" x H 10" x D 7".

RCA Test Instruments

WO-33A Oscilloscope and WO-33A(K) Oscilloscope Kit



Here's the ideal second scope because it's **SUPER PORTABLE**—only 14 pounds—and its small compact size, plus its high gain and wide bandwidth, will let you tackle virtually any electronics servicing job you encounter inside or outside the shop or lab. The WO-33A will give you what you need in gain, bandwidth, transient response, accuracy, versatility, and portability—and it features voltage-calibrated frequency-compensated 3-to-1 step attenuator; scaled graph screen and calibrating voltage source allows direct reading of peak-to-peak voltages; "plus-minus" internal sync—holds sync at 4.5 Mc; shielded input cable with low-capacitance probe; built-in brackets to hold power cord, cables and probe. W 6½" x H 8¾" x D 10¼".

WO-91A 5-Inch Color-TV Oscilloscope



The WO-91A is a high-performance, wide-band oscilloscope ideally suited for color-TV, black-and-white TV, and other electronic applications. Dual bandwidth (4.5 Mc, 0.053 volts rms/in.) (1.5 Mc, 0.018 volts rms/in.). Internal calibrating voltage and calibrated graph screen. Includes special direct/low cap shielded probe and cable. W 9" x H 13½" x D 16½".

RCA Test Instruments

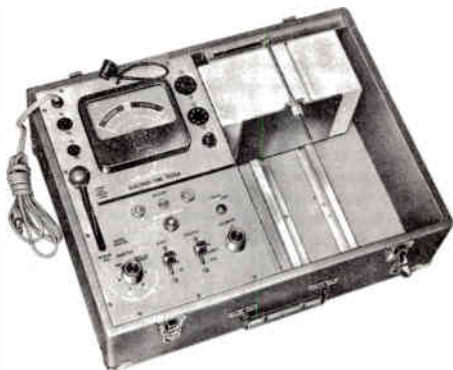
WT-100A Electron-Tube MicroMhoMeter



The WT-100A is a laboratory instrument which measures tube characteristics, under actual operating-voltage and current conditions, with an accuracy comparable to that of tube manufacturers' equipment. Tests receiving-type and small transmitting tubes. Plug-in multiple-socket assemblies and 14-pin selector switches assure utmost flexibility for present and future requirements. The WT-100A measures: true transconductance with an accuracy better than $\pm 3\%$, both control-grid-to-plate and suppressor-grid-to-plate values; electrode currents—plate, screen grid, suppressor grid, and control grid currents from 3 microamps full scale to 300 ma full scale; ac heater current; and voltage drop of vacuum and gas tubes, dry-disc rectifiers and crystal diodes. Features built-in gm calibrating circuit—no null meters or extra devices required; built-in shorts test; burnout-proof meter, even on 3 microamp full-scale range; regulated power supplies for dc voltages; 250-ma dc supply for filaments of battery-operated tube types; measures gm up to 100,000 micromhos in 6 ranges. W $23\frac{1}{2}$ " x H 8" x D $18\frac{1}{2}$ ".

RCA Test Instruments

WT-110A Automatic Electron-Tube Tester



All-new in approach to fast, accurate tube testing. The WT-110A utilizes punched cards of heavy-duty plastic for automatic internal set-up of pin connections and test voltages. Complete transconductance test set-up takes only seconds; cards are permanently hinged in case for convenient insertion into test slot. The WT-110A tests for gas, shorts, interelectrode leakage and over-all tube quality. Quality of tube is indicated on "Renew-?-Good" meter scale. Tests 7-pin, 9-pin, octal and lock-in types. Accessory sockets available for testing 4, 5, 6, 7-pin and subminiature types. W $17\frac{1}{4}$ " x H $6\frac{1}{8}$ " x D $13\frac{1}{4}$ ".

RCA Test Instruments WR-70A RF/IF/Vf Marker Adder



This instrument eliminates possibility of waveform distortion during visual alignment techniques by adding markers after the rf signal is demodulated. To be used with WR-69A, WR-99A or similar electronic equipment. Provides four marker choices: positive peak, negative peak, positive and negative peaks (wide band), positive and negative peaks (narrow band) for discriminator alignment. Hi-Q markers are high in amplitude, narrow in width. Power Supply voltage is stabilized for rock-steady trace display. W 10½" x H 7½" x D 6¼".

WR-99A Crystal-Calibrated Marker Generator



Supplies fundamental-frequency rf carrier of crystal accuracy for aligning and trouble-shooting color, black-and-white TV, FM receivers and other electronic equipment operating in 19 Mc to 260 Mc range. All important sound- and picture-carrier frequencies, intermediate frequencies, and color-TV points are spotted on dial scale. Easy-to-read, spreadout dial scales and adjustable index pointer permit precise setting of frequency. Built-in speaker for zero-beat calibrating checks. Supplied complete with cables. W 13½" x H 10" x D 7".

RCA Test Instruments

WV-84C Ultra-Sensitive DC Microammeter



A battery-operated, vacuum-tube microammeter designed for measuring minute direct currents in industrial, chemical and general laboratory applications. Self-contained batteries permit use almost anywhere. Low-drain tubes extend battery life and protect the meter against burnout due to accidental overloads. When the instrument is used as a voltmeter, it is especially suited to measurements in circuits where loading is a critical factor. It can also be used as an ohmmeter to measure extremely high resistances, such as leakage and insulation resistance in the order of billions of ohms. Features six direct-current ranges for currents from 0.0002 to 1000 microamperes. Overall microammeter accuracy on X.01 range $\pm 5\%$ of full scale; accuracy on all other ranges $\pm 4\%$ of full scale. Voltage drop for full scale deflection only 0.5-volt. W $10\frac{1}{2}$ " x H $7\frac{1}{2}$ " x D $6\frac{1}{4}$ ".

RCA Test Instruments

WG-289 and WG-297 High Voltage Probes



The WG-289 extends the dc-voltage range of the WV-98A, WV-77A, WV-77B, WV-77C, WV-97A, WV-87A, WV-87B VoltOhmysts to 50,000 volts. The WG-297 extends the range of the WV-77E and the WV-77E(K) to 50,000 volts. The WG-289 is provided with a microphone-type connector, and the WG-297 is provided with banana-plugs for use with the appropriate VoltOhmysts and other voltmeters. WG-206—1090 megohm multiplier resistor for VTVM's having 11-megohm input (multiplying factor 100). WG-210—900-megohm resistor multiplies 5000-volt dc range of 20,000 ohms-per-volt VOM's by a factor of 10. WG-211—495-megohm resistor multiplies 250-volt dc range of 20,000-ohms-per-volt VOM's by factor of 100.

TEST AND MEASURING EQUIPMENT

• **INSTRUCTION BOOKLETS** containing specifications, operating and maintenance data, application information, schematic diagrams, and replacement parts lists, are available for all RCA test instruments.

WA-44A	(Audio Oscillator).....	\$0.50
WA-44B	(Audio Oscillator).....	.50
WO-56A	(7" Oscilloscope).....	.50
WO-78A	(5" Oscilloscope).....	.50
WO-78B	(5" Oscilloscope).....	1.00
WO-88A	(5" Oscilloscope).....	.50
WO-91A	(5" Oscilloscope).....	1.00
WR-36A	(Dot-Bar Gen.).....	.50
WR-39C	(TV Calibrator).....	.50
WR-46A	(Video Dot/Crosshatch Gen.).....	.75
WR-49A	(RF Generator).....	.50
WR-49B	(RF Generator).....	1.00
WR-59C	(TV Sweep Gen.).....	.50
WR-61B	(Color-Bar Gen.).....	1.00
WR-67A	(Test-Oscillator).....	.25
WR-70A	(RF/IF/VF Marker Adder).....	.75
WV-74A	High-Sensitivity AC UTVM.....	.75
WR-86A	(UHF Sweep Gen.).....	.50
WR-89A	(Marker Gen.).....	.50
WR-99A	(Marker Calibrator).....	1.00
WV-65A	(VoltOhmyst).....	.25
WV-75A	(VoltOhmyst).....	.25
WV-77A	(VoltOhmyst).....	.25
WV-77B	(VoltOhmyst).....	.25
WV-77C	(VoltOhmyst).....	1.00
WV-77E	(VoltOhmyst).....	1.00
WV-84A	(Microammeter).....	.25
WV-84B	(Microammeter).....	.75
WV-87A	(VoltOhmyst).....	.50
WV-87B	(VoltOhmyst).....	.75
WV-95A	(VoltOhmyst).....	.25
WV-97A	(VoltOhmyst).....	.50
WV-98A	(VoltOhmyst).....	1.00
195-A	(VoltOhmyst).....	.25
WT-100A	(Electron-Tube MicroMhoMeter).....	1.75
WT-100A	(Tube Chart).....	3.00
WT-110A	Automatic Electron-Tube Tester.....	1.00

1959

JANUARY

SUN.	MON.	TUE.	WED.	THU.	FRI.	SAT.
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JULY

SUN.	MON.	TUE.	WED.	THU.	FRI.	SAT.
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FEBRUARY

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AUGUST

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MARCH

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SEPTEMBER

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APRIL

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OCTOBER

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NOVEMBER

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DECEMBER

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1960

JANUARY						
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MAY						
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NOVEMBER						
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JUNE						
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DECEMBER						
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