1950 RCA TUBE REFERENCE BOOK

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The Fountainhead of Modern Tube Development is **RCA**

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Receiving tube base diagram guide on 475 RCA types. Arranged in numerical-alphabetical sequence. The diagrams of any three tube types can be located and kept in front of you at the same time. Wire-spiral binding. Price 75 cents.

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Popular for over a decade, this handbook is a "must" for all servicemen interested in basic principles of practical circuit design. Its 356 pages are copiously illustrated. Edited by F. Langsford Smith of Amalgamated Wireless Valve Company Pty., Ltd., Australia. Price $1.25.

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Complete, authorized information on RCA transmitting tubes and other non-receiving types. Be sure to mention tube type booklet desired. Single copy on any type free on request.

RCA RECEIVING TUBE CHART I

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	S.C.	Cathode Type and Rating: C.T.	Volts	Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
00-A	Detector Triode	D12	4D	D.C. F	5.0	0.25	Grid-Leak Detector	45	Grid Return to (−) Filament			1.5	30000	666	20	—	—	00-A
01-A	Detector★ Amplifier	D12	4D	D.C. F	5.0	0.25	Class A Amplifier	90	− 4.5	—	—	2.5	11000	725	8.0	—	—	01-A
								135	− 9.0			3.0	10000	800	8.0			
0Z4	Full-Wave Gas Rectifier	B3	4R	Cold	—	—	Rectifier	Starting-Supply Voltage per Plate, 300 min. peak volts. Peak Plate Current, 200 max. ma. D-C Output Current, 75 max., 30 min. ma. D-C Output Voltage, 300 max. volts.										0Z4
0Z4-G	Full-Wave Gas Rectifier	B1	G-4R	Cold	—	—	Rectifier											0Z4-G
1A3	HF Diode	B0	5AP1	H	1.4	0.15	Detector Rectifier	Max. Peak Inverse Volts, 330 Max. Peak Plate Ma., 5				Max. D-C Output Ma., 0.5 Max. Peak Heater-Cathode Volts, 140						1A3
1A4-P	Supercontrol R F Amplifier Pentode	D9	4M	D.C. F	2.0	0.06	Amplifier	For other characteristics, refer to Type 1D5-GP.										1A4-P
1A5-GT	Power Amplifier Pentode	C3	G-6X	D.C. F	1.4	0.05	Class A Amplifier	85	− 4.5	85	0.7	3.5	300000	800		25000	0.100	1A5-GT
								90	− 4.5	90	0.8	4.0	300000	850		25000	0.115	
1A6	Pentagrid Converter ●	D9	6L	D.C. F	2.0	0.06	Converter	135	(− 3.0 min.	67.5	2.5	1.2	400000	Anode-Grid (#2): 180 max. volts, 2.3 ma. Oscillator-Grid (#1) Resistor ■, Conversion Transcond., 300 micromhos.				1A6
								180		67.5	2.4	1.3	500000					
1A7-GT	Pentagrid Converter ●	C3	GT-7ZK	D.C. F	1.4	0.05	Converter•	90	0	45◆	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.				1A7-GT
1B3-GT/ 8016	Half-Wave Rectifier	D1a	3C	F	1.25	0.2	Half-Wave Rectifier	Max. Peak Inverse Plate Volts, 40000 Max. Peak Plate Ma., 17				Max. Average Plate Ma., 2 Max. Frequency of Supply Voltage, 300 Kc						1B3-GT/ 8016
1B4-P	RF Amplifier Pentode	D9	4M	D.C. F	2.0	0.06	Amplifier	For other characteristics, refer to Type 1E5-GP.										1B4-P

1B5/25S	Duplex-Diode Triode	D5	6M	D.C. F	2.0	0.06	Triode Unit as Amplifier	For other characteristics, refer to Type 1H6-G.											**1B5/25S**
1B7-GT	Pentagrid Converter	C3	GT-7Z4	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.					1B7-GT
1C5-GT	Power Amplifier Pentode	C3	G-8X	D.C. F	1.4	0.10	Class A Amplifier	83 90	− 7.0 − 7.5	83 90	1.6 1.6	7.0 7.5	110000 115000	1500 1550	——	——	9000 8000	0.20 0.24	**1C5-GT**
1C6	Pentagrid Converter ¤	D9	6L	D.C. F	2.0	0.12	Converter	For other characteristics, refer to Type 1C7-G.											**1C6**
1C7-G	Pentagrid Converter ¤	D8	G-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.					**1C7-G**
1D5-GP	Supercontrol RF Amplifier Pentode	D8	G-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-GP**
1D5-GT	Supercontrol RF Amplifier Tetrode	D8	G-8R	D.C. F	2.0	0.06	Class A Amplifier	180	− 3.0	67.5	0.7	2.2	600000	650	——	——	——		1D5-GT
1D7-G	Pentagrid Converter ¤	D8	G-7Z	D.C. F	2.0	0.06	Converter	For other characteristics, refer to Type 1A6.											**1D7-G**
1D8-GT	Diode-Triode-Power Amplifier Pentode	C3	G-6J	D.C. F	1.4	0.10	Pentode Unit as Class A Amplifier	45 90	− 4.5 − 9.0	45 90	0.3 1.0	1.6 5.0	300000 200000	650 925	——	——	20000 12000	0.035 0.200	**1D8-GT**
							Triode Unit as Class A Amplifier	45 90	0 0	——	——	0.3 1.1	77000 43500	325 575	25 25	——	——		
1E5-GP	RF Amplifier Pentode	D8	G-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§ 1.5§	600 650	——	——	——	——	**1E5-GP**
1E7-GT	Twin-Pentode Power Amplifier	D3	G-8C	D.C. F	2.0	0.24	Class A Amplifier	135	− 7.5	135	——	Power Output is for one tube at stated plate-to-plate load.					24000	0.575	**1E7-GT**
1F4	Power Amplifier Pentode	D12	8K	D.C. F	2.0	0.12	Amplifier	For other characteristics, refer to Type 1F5-G.											**1F4**
1F5-G	Power Amplifier Pentode	D10	G-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	240000 200000	1400 1700	——	——	20000 16000	0.11 0.31	**1F5-G**
1F6	Duplex-Diode Pentode	D9	8W	D.C. F	2.0	0.06	Pentode Unit as Amplifier	For other characteristics, refer to Type 1F7-G.											**1F6**
1F7-G	Duplex-Diode Pentode	D8	G-7AF	D.C. F	2.0	0.06	Pentode Unit as RF Amplifier	180	− 1.5	67.5	0.7	2.2	1.0§	650	——	——	——		**1F7-G**
							Pentode Unit as AF Amplifier	135‡	− 2.0	Screen Supply, 135 volts applied through 0.8-megohm resistor. Grid Resistor,** 1.0 megohm. Voltage Gain, 46.									

Discontinued types are shown in light face.

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	Tube Dimensions and Socket Connections: S. C.	Cathode Type and Rating: C. T.	Cathode Type and Rating: Volts	Cathode Type and Rating: Amp.	Use	Plate Supply Volts	Grid Bias ‡‡ Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
1G4-GT	Detector Amplifier Triode	C3	G-5S$_7$	D.C. F	1.4	0.05	Class A Amplifier	90	− 6.0	—	—	2.3	10700	825	8.8	—	—	1G4-GT
1G5-G	Power Amplifier Pentode	D10	G-8X	D.C. F	2.0	0.12	Class A Amplifier	90 135	− 6.0 −13.5	90 135	2.5 2.5	8.5 8.7	133000 160000	1500 1550	—	8500 9000	0.25 0.55	1G5-G
1G6-GT	Twin-Triode Amplifier	C3	G-7AB	D.C. F	1.4	0.10	Class B Amplifier	90	0	—	—	Power Output is for one tube at stated plate-to-plate load.				12000	0.350	1G6-GT
1H4-G	Detector★ Amplifier	D3	G-5S$_7$	D.C. F	2.0	0.06	Class A Amplifier	90 135 180	− 4.5 − 9.0 −13.5	—	—	2.5 3.0 3.1	11000 10300 10300	850 900 900	9.3 9.3 9.3	—	—	1H4-G
							Class B Amplifier	157.5	−15.0	—	—	1.0♣	—	—	—	8000	2.1†	
1H5-GT	Diode High-Mu Triode	C3	GT-5Z4	D.C. F	1.4	0.05	Triode Unit as Class A Amplifier	90	0	—	—	0.15	240000	275	65	—	—	1H5-GT
1H6-G	Duplex-Diode Triode	D3	G-7AA	D.C. F	2.0	0.06	Triode Unit as Class A Amplifier	135	− 3.0	—	—	0.8	35000	575	20	—	—	1H6-G
1J5-G	Power Amplifier Pentode	D10	G-8X	D.C. F	2.0	0.12	Class A Amplifier	135	−16.5	135	2.0	7.0	105000	950	—	13500	0.45	1J5-G
1J6-GT	Twin-Triode Amplifier	D3	G-7AB	D.C. F	2.0	0.24	Class B Amplifier	135 135	0 − 3.0	—	—	Power Output is for one tube at stated plate-to-plate load.				10000 10000	2.1 1.9	1J6-GT
1L4	RF Amplifier Pentode	B8	6AR	D.C. F	1.4	0.05	Class A Amplifier	90 90	0 0	67.5 90	1.2 2.0	2.9 4.5	600000 260000	925 1025	—	—	—	1L4
1LA4	Power Amplifier Pentode	B5	8AD$_1$	D.C. F	1.4	0.05	Amplifier	For other characteristics, refer to Type 1A5-GT.										1LA4
1LA6	Pentagrid Converter	B5	7AK	D.C. F	1.4	0.05	Converter	90	0	45♣	0.6	0.55	750000	Anode-Grid (♯2): 90 max. volts, 1.2 ma. Oscillator Grid (♯1) Resistor, 0.2 meg. Conversion Transcond., 250 micromhos.				1LA6
1LB4	Power Amplifier Pentode	B5	8AD$_2$	D.C. F	1.4	0.05	Class A Amplifier	For other characteristics, refer to Pentode Unit of Type 1D8-GT.										1LB4
1LC5	RF Amplifier Pentode	B5	7AO	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 1.5§	750 775	—	—	—	1LC5

1LC6	Pentagrid Converter	B5	7AK	D.C. F	1.4	0.05	Converter	45 90	0 0	35 35	0.75 0.70	0.70 0.75	300000 300000	Anode-Grid (# 2): 45 max. volts, 1.4 ma. Oscillator-Grid (# 1) Resistor, 1.0 meg. Conversion Transcond., 275 micromhos.						**1LC6**
1LD5	Diode-Pentode	B5	6AX	D.C. F	1.4	0.05	Pentode Unit as Class A Amplifier	Plate Supply, 90 volts applied through 1 meg. resistor. Screen Supply, 90 volts applied through 5.6 meg. resistor. Grid Bias, 0 volts, Grid Resistor, 10 megohms. Voltage Gain, 101 approx.												**1LD5**
1LE3	Detector Amplifier Triode	B5	4AA	F	1.4	0.05	Class A Amplifier	90 90	0 − 3	——	——	4.5 1.4	11200 19000	1300 760	14.5 14.5	——	——			**1LE3**
1LH4	Diode High-Mu Triode	B5	6AQ	D.C. F	1.4	0.05	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 1H5-GT.												**1LH4**
1LN5	RF Amplifier Pentode	B5	7AO	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.35	1.6	1.1§	800	——	——	——			**1LN5**
1N5-GT	RF Amplifier Pentode	C3	GT-6Y8	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.3	1.2	1.5§	750	——	——	——			**1N5-GT**
1N6-G	Diode—Power Amplifier Pentode	D1	G-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			1N6-G
1P5-GT	Supercontrol RF Amplifier Pentode	C3	GT-6Y8	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.7	2.3	800000	750	——	——	——			**1P5-GT**
1Q5-GT	Beam Power Amplifier	C3	G-6AF	D.C. F	1.4	0.1	Class A Amplifier	110	− 6.6	110	1.4	10.0	100000	2200	——	8000	0.40			**1Q5-GT**
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.						**1R5**
1S4	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			**1S4**
1S5	Diode-Pentode	B0	6AU	D.C. F	1.4	0.05	Pentode Unit as AF Amplifier	Plate Supply, 90 volts applied through 1 meg. resistor. Screen Supply, 90 volts applied through 3 meg. resistor. Grid Bias, 0 volts. Grid Resistor, 10 megohms. Voltage Gain, 50 approx.												**1S5**
1T4	Super-Control RF Amplifier 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	——	——	——			**1T4**
1T5-GT	Beam Power Amplifier	C3	G-6X	D.C. F	1.4	0.05	Class A Amplifier	90	− 6.0	90	0.8	6.5	——	1150	——	14000	0.17			**1T5-GT**
1U4	RF Amplifier Pentode	B0	6AB	D.C. F	1.4	0.05	Class A Amplifier	90	0	90	0.45	1.6	1.5§	900	——	——	——			**1U4**
1U5	Diode-Pentode	B0	6BW	D.C. F	1.4	0.05	Pentode Unit as Class A Amplifier	Plate Supply, 90 volts applied through 1 meg. resistor. Screen Supply, 90 volts applied through 3.3 meg. resistor. Grid Bias, 0 volts. Grid Resistor, 10 megohms. Voltage Gain, 66 approx.												**1U5**
1-v	Half-Wave Rectifier	D8	4G	H	6.3	0.3	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 325 Max. D-C 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.								**1-v**

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 45

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	Use (Values to right give operating conditions and characteristics for indicated typical use)	Plate Supply Volts	Grid Bias m Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
2A3	Power Amplifier Triode	E3	4D	F	2.5	2.5	Class A Amplifier	250	−45.0	—	—	60.0	800	5250	4.2	2500	3.5	2A3
							Push-Pull Class AB1 Amplifier	300	Cath. Bias, 780 ohms‡			80.0‡	—	—	—	5000	10.0†	
								300	−62 volts, fixed bias			80.0‡				3000	15.0†	
2A4-G	Glow-Discharge Triode	D3	G-S5	D.C. F	2.5	2.5	Relay Service	Max. Peak Inverse Anode Volts, 200 Max. Peak Forward Anode Volts, 200					Max. Peak Anode Current, 1.25 ampere Max. Av. Anode Current, 0.1 ampere					2A4-G
2A5	Power Amplifier Pentode	D12	6B	H	2.5	1.75	Amplifier	For other characteristics, refer to Type 6F6-G.										2A5
2A6	Duplex-Diode High-Mu Triode	D9	6Q	H	2.5	0.8	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.										2A6
2A7	Pentagrid Converter e	D8	7C	H	2.5	0.8	Converter	For other characteristics, refer to Type 6A8.										2A7
2B7	Duplex-Diode Pentode	D9	7D	H	2.5	0.8	Pentode Unit as Amplifier	For other characteristics, refer to Type 6B8-G.										2B7
2E5	Electron-Ray Tube	D5	6R	H	2.5	0.8	Visual Indicator	For other characteristics, refer to Type 6E5.										2E5
3A8-GT	Diode-Triode RF Amplifier Pentode	C5a	8AS	D.C. F	1.4 2.8	0.1 0.05	Triode Unit as Class A Amplifier	90	0	—	—	0.2	200000	325	65	—	—	3A8-GT
							Pentode Unit as Class A Amplifier	90	0	90	0.5	1.5	800000	750	—	—	—	
3LF4	Beam Power Amplifier	B5	6BB	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	For other characteristics, refer to Type 3Q5-GT.										3LF4
3Q4	Power Amplifier Pentode	B8	7BA	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	For other characteristics, refer to Type 3V4.										3Q4
3Q5-GT	Beam Power Amplifier	C3	G-7AP	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	110	− 6.6	110	1.4	10.0	100000	2200	—	8000	0.60	3Q5-GT
								110	− 6.6	110	1.1	8.5	110000	2000	—	8000	0.33	
3S4	Power Amplifier Pentode	B8	7BA	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	90	− 7	67.5	1.4	7.4	100000	1575	—	8000	0.27	3S4
								90	− 7	67.5	1.1	6.1	100000	1425	—	8000	0.235	
3V4	Power Amplifier Pentode	B8	6BX	D.C. F	1.4 2.8	0.1 0.05	Class A Amplifier	90	− 4.5	90	2.1	9.5	100000	2150	—	10000	0.27	3V4
								90	− 4.5	90	1.7	7.7	120000	2000	—	10000	0.24	

5T4	Full-Wave Rectifier	D7	5T	F	5.0	2.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1550	Max. D-C Output Ma., 225 Max. Peak Plate Ma., 675	Min. Total Effect. Supply Imped. per Plate, 150 ohms	**5T4**
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 550 Max. Peak Inverse Volts, 1550	Max. D-C Output Ma., 225 Max. Peak Plate Ma., 675	Min. Value of Input Choke, 3 henries	
5TP4	Projection Kinescope	H1	12C	H	6.3	0.6	Picture Reproduction With Reflective Optical System	Focus: Electrostatic Deflection: Magnetic Deflection Angle: 50° Phosphor: No. 4 Picture Size: 18" x 24"	Anode-No. 2 Volts, 27000 (max.) Anode-No. 1 Volts for Focus, 4300 to 5400 (6000 max.) Grid-No. 2 Volts, 200 (350 max.) Grid-No. 1 Volts for Visual Cutoff, −42 to −98	Anode-No. 2 Current Range, 100 to 200 microamperes Anode-No. 1 Current, 75 microamperes (max.) Grid-No. 2 Current Range, −15 to +15 microamperes	**5TP4**
5U4-G	Full-Wave Rectifier	E2	G-5T1	F	5.0	3.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1550	Max. D-C Output Ma., 225 Max. Peak Plate Ma., 675	Min. Total Effect. Supply Imped. per Plate, 75 ohms	**5U4-G**
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 550 Max. Peak Inverse Volts, 1550	Max. D-C Output Ma., 225 Max. Peak Plate Ma., 675	Min. Value of Input Choke, 3 henries	
5V4-G	Full-Wave Rectifier	D10	G-5L1	H	5.0	2.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 375 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 175 Max. Peak Plate Ma., 525	Min. Total Effect. Supply Imped. per Plate, 100 ohms	**5V4-G**
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 500 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 175 Max. Peak Plate Ma., 525	Min. Value of Input Choke, 4 henries	
5W4	Full-Wave Rectifiers	C2	5T	F	5.0	1.5	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 350 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 100 Max. Peak Plate Ma., 300	Min. Total Effect. Supply Imped. per Plate, 50 ohms	**5W4**
5W4-GT		C7	G-5T1				With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 500 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 100 Max. Peak Plate Ma., 300	Min. Value of Input Choke, 6 henries	5W4-GT
5X4-G	Full-Wave Rectifier	E2	G-5Q	F	5.0	3.0	For other ratings, refer to Type 5U4-G.				**5X4-G**
5Y3-GT	Full-Wave Rectifier	C7	G-5T1	F	5.0	2.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 350 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 125 Max. Peak Plate Ma., 375	Min. Total Effect. Supply Imped. per Plate, 50 ohms	**5Y3-GT**
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 500 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 125 Max. Peak Plate Ma., 375	Min. Value of Input Choke, 5 henries	
5Y4-G	Full-Wave Rectifier	D10	G-5Q	F	5.0	2.0	For other ratings, refer to Type 5Y3-GT.				**5Y4-G**
5Z3	Full-Wave Rectifier	E3	4C	F	5.0	3.0	For other ratings, refer to Type 5U4-G.				**5Z3**
5Z4	Full-Wave Rectifier	C2	5L	H	5.0	2.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 350 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 125 Max. Peak Plate Ma., 375	Min. Total Effect. Supply Imped. per Plate, 50 ohms	**5Z4**
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 500 Max. Peak Inverse Volts, 1400	Max. D-C Output Ma., 125 Max. Peak Plate Ma., 375	Min. Value of Input Choke, 5 henries	
6A3	Power Amplifier Triode	E3	4D	F	6.3	1.0	Amplifier	For other characteristics, refer to Type 6B4-G.			**6A3**

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	Tube Dimensions and Socket Connections: S. C.	Cathode Type and Rating: C. T.	Cathode Type and Rating: Volts	Cathode Type and Rating: Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
6A4/LA	Power Amplifier Pentode	D12	5B	F	6.3	0.3	Class A Amplifier	100 180	− 6.5 −12.0	100 180	1.6 3.9	9.0 22.0	83250 45500	1200 2200	——	11000 8000	0.31 1.40	6A4/LA
6A6	Twin-Triode Amplifier	D12	7B	H	6.3	0.8	Amplifier	For other characteristics, refer to Type 6N7-GT.										6A6
6A7	Pentagrid Converter ▥	D9	7C	H	6.3	0.3	Converter	For other characteristics, refer to Type 6A8.										6A7
6A7S	Pentagrid Converter ▥	D9	7C	H	6.3	0.3	Converter	For other characteristics, refer to Type 6A8.										6A7S
6A8 6A8-G 6A8-GT	Pentagrid Converters ▥	C1 D9 C3	8A G-8A‡ GT-8A‡	H	6.3	0.3	Converter	100 250	− 1.5 − 3.0	50 100	1.3 2.7	1.1 3.5	600000 360000	Anode-Grid (▮2): 250▮ max. volts, 4.0 ma. Oscillator-Grid (▮1) Resistor ▮. Conversion Transcond., 550 micromhos.				6A8 6A8-G 6A8-GT
6AB5/ 6N5	Electron-Ray Tube	D4	6R	H	6.3	0.15	Visual Indicator	Plate & Target Supply = 135 volts. Triode Plate Resistor = 0.25 meg. Target Current = 2.0 ma. Grid Bias, − 10.0 volts; Shadow Angle, 0°. Bias, 0 volts; Angle, 90°; Plate Current, 0.5 ma. Plate & Target Supply = 135 volts. Triode Plate Resistor = 1.0 meg. Target Current = 1.9 ma. Grid Bias, −15.5 volts; Shadow Angle, 0°. Bias, 0 volts; Angle 90°; Plate Current, 0.13 ma.										6AB5/ 6N5
6AB7/ 1853	Television Amplifier Pentode	B3	8N	H	6.3	0.45	Class A Amplifier	300	− 3.0	200	3.2	12.5	700000	5000	——	——	——	6AB7/ 1853
6AC5-GT	High-Mu Power Amplifier Triode	C3	G-6Q‡	H	6.3	0.4	Class B Amplifier	250	0	——	——	5.0◆	——	——	——	10000	8.0†	6AC5-GT
							Dynamic-Coupled Amplifier With 76 Driver	250	Bias for both 6AC5-GT and 76 is developed in coupling circuit. Average Plate Current of Driver = 5.5 milliamperes. Average Plate Current of 6AC5-GT = 32 milliamperes.							7000	3.7	
6AC7/ 1852	Television Amplifier Pentode	B3	8N	H	6.3	0.45	Class A Amplifier	300	Cath. Bias	150	2.5	10.0	1.0§	9000	Cathode-Bias Resistor, 160 ohms			6AC7/ 1852
6AD6-G	Electron-Ray Tube Twin Indicator Type	B5a	7AG	H	6.3	0.15	Visual Indicator	Target Voltage, 100 volts. Control-Electrode Voltage, −23 volts; Shadow Angle, 135°; Target Current, 0.8 ma. Control-Electrode Voltage, 45 volts; Angle, 0°; Target Current, 1.5 ma. Target Voltage, 150 volts. Control-Electrode Voltage, −50 volts; Shadow Angle, 135°; Target Current, 1.2 ma. Control-Electrode Voltage, 75 volts; Angle, 0°; Target Current, 3 ma.										6AD6-G

6AD7-G	Triode-Power Amplifier Pentode	D10	8AY	H	6.3	0.85	Triode Unit as Class A Amplifier	250	−25.0	—	—	3.7	19000	325	6	—	—	**6AD7-G**
							Pentode Unit as Class A Amplifier	250	−16.5	250	6.5	34.0	80000	2500	—	7000	3.2	
							Pentode Unit With 6F6-G as Push-Pull Class AB$_1$ Amplifier	375	Cath. Bias	250	6.7◆	41.0◆	Cathode-Bias Resistor, 470 ohms◆			16000	9.0†	
6AE5-GT	Amplifier Triode	C3	G-6Q‡	H	6.3	0.3	Class A Amplifier	95	−15.0	—	—	7.0	3500	1200	4.2	—	—	6AE5-GT
6AE6-G	Twin-Plate Control Tube	D3	7AH	H	6.3	0.15	Remote Cutoff Triode	250	− 1.5	—	—	6.5	25000	1000	25	—	—	**6AE6-G**
								250	−35.0	—	—	0.01	—	—	—	—	—	
							Remote Cutoff Triode	250	− 1.5	—	—	4.5	35000	950	33	—	—	
								250	− 9.5	—	—	0.01	—	—	—	—	—	
6AE7-GT	Twin-Input Triode Amplifier	C3	G-7AX	H	6.3	0.5	Class A Amp.AA	250	−13.5	—	—	10.0	4650	3000	14	—	—	6AE7-GT
							Driver For Push-Pull 6AC5-GT In Dynamic-Coupled Amplifier	250	Bias for both 6AC5-GT and 6AE7-GT developed in coupling circuit. Zero-Signal Plate Current of 6AE7-GT = 10 milliamperes. Zero-Signal Plate Current of 6AC5-GT = 64 milliamperes. Power Output is for two 6AC5-GT at stated plate-to-plate load.						10000	9.5	
6AF6-G	Electron-Ray Tube Twin Indicator Type	B2	7AQ	H	6.3	0.15	Visual Indicator	Target Voltage, 125 volts. Control-Electrode Voltage, 0 volts; Shadow Angle, 95°; Target Current, 0.65 ma. Control-Electrode Voltage, 80 volts; Angle, 0°. Target Voltage, 250 volts. Control-Electrode Voltage, 0 volts; Shadow Angle, 95°; Target Current, 2.2 ma. Control-Electrode Voltage, 160 volts; Angle, 0°.								**6AF6-G**
6AG5	RF Amplifier Pentode	B0	7BD	H	6.3	0.3	As Pentode	100	Cath.	100	1.6	5.5	300000	4750	Cath. Bias Res., 100 ohms			**6AG5**
							Class A Amplifier	250	Bias	150	2.0	7.0	800000	5000	Cath. Bias Res., 200 ohms			
							As Triode◻	180	Cath.	—	—	7.0	7900	5700	Cath. Bias Res., 350 ohms			
							Class A Amplifier	250	Bias	—	—	5.5	11000	3800	Cath. Bias Res., 825 ohms			
6AG7	Video Power Amplifier Pentode	C2	8Y	H	6.3	0.65	Class A Amplifier	300	Cath. Bias − 2.0	125	7.0	28.0	Cathode-Bias Resistor, 57 ohms. Load Resistance, 3500 ohms. Peak-to-Peak Volts Output, 140 approx.					**6AG7**
6AK6	Power Amplifier Pentode	B5	7BK	H	6.3	0.15	Class A Amplifier	180	− 9.0	180	2.5	15	200000	2300	—	10000	1.1	**6AK6**
6AL5	Twin Diode	A1	6BT	H	6.3	0.3	Detector Rectifier	Max. Peak Inverse Volts, 420 Max. Peak Plate Ma. per Plate, 54					Max. D-C Output Ma. per Plate, 9 Max. Peak Heater-Cathode Volts, 330					**6AL5**
6AQ5	Beam Power Amplifier	B1a	7BZ	H	6.3	0.45	Single Tube Class A Amplifier	180	− 8.5	180	3.0	29.0	58000	3700	—	5500	2.0	**6AQ5**
								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◆	—	—	—	10000	10.0†	
6AQ6	Duplex-Diode High-Mu Triode	B8	7BT	H	6.3	0.15	Triode Unit as Class A Amplifier	100	− 1.0	—	—	0.8	61000	1150	70	—	—	**6AQ6**
								250	− 3.0			1.0	58000	1200	70			

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
		Dimen.	S. C.	C. T.	Volts	Amp.												
6AR5	Power Pentode	B1a	6CC	H	6.3	0.4	Class A Amplifier	250	−18.0	250	5.5	32	68000	2300	——	7600	3.4	6AR5
								250	−16.5	250	5.7	34	65000	2400	——	7000	3.2	
6AS5	Beam Power Amplifier	B1a	7CV	H	6.3	0.8	Class A Amplifier	150	− 8.5	110	2.0	35	——	5600	——	4500	2.2	6AS5
6AT6	Duplex-Diode High-Mu Triode	B0	7BT	H	6.3	0.3	Triode Unit as Class A Amplifier	100	− 1.0	——	——	0.8	54000	1300	70	——	——	6AT6
								250	− 3.0	——	——	1.0	58000	1200	70	——	——	
6AU6	RF Amplifier Pentode	B0	7SK1	H	6.3	0.3	Class A Amplifier	100	− 1.0	100	2.0	5.2	500000	3900	——	——	——	6AU6
								250	− 1.0	150	4.3	10.8	1.0§	5200	——	——	——	
6AV6	Twin-Diode High-Mu Triode	B0	7BT	H	6.3	0.3	Triode Unit as Class A Amplifier	100	− 1.0	——	——	0.5	80000	1250	100	——	——	6AV6
								250	− 2.0	——	——	1.2	62500	1600	100	——	——	
6B4-G	Power Amplifier Triode	E2	G-53	F	6.3	1.0	Class A Amplifier	250	−45.0	——	——	60.0	800	5250	4.2	2500	3.20	6B4-G
							Push-Pull Class AB1 Amplifier	325	Cath. Bias, 850 ohms◆			80.0◆	——	——	——	5000	10.0†	
								325	−68 volts, fixed bias			80.0◆				3000	15.0†	
6B5	Direct-Coupled Power Amplifier	D12	8AS	H	6.3	0.8	Class A Amplifier	For other characteristics, refer to Type 6N6-G.										6B5
6B6-G	Duplex-Diode High-Mu Triode	D8	G-7V1	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.										6B6-G
6B7	Duplex-Diode Pentode	D9	7D	H	6.3	0.3	Pentode Unit as Amplifier	For other characteristics, refer to Type 6B8-G.										6B7
6B7S	Duplex-Diode Pentode	D9	7D	H	6.3	0.3	Pentode Unit as Amplifier	For other characteristics, refer to Type 6B8-G.										6B7S
6B8	Duplex-Diode Pentode	C1	8E	H	6.3	0.3	Pentode Unit as Amplifier	For other characteristics, refer to Type 12C8.										6B8
6B8-G	Duplex-Diode Pentode	D9	G-6E1	H	6.3	0.3	Pentode Unit as RF Amplifier	100	− 3.0	100	1.7	5.8	300000	950	——	——	——	6B8-G
								250	− 3.0	125	2.3	9.0	600000	1125	——	——	——	
							Pentode Unit as AF Amplifier	90 ■ Cath. Bias, 3500 ohms, Screen Resistor = 1.1 meg.							Grid Resistor,** 0.5 megohm.		Gain per stage = 55 Gain per stage = 79	
								300 ■ Cath. Bias, 1600 ohms, Screen Resistor = 1.2 meg.										
6BA6	RF Amplifier Pentode	B0	7BK1	H	6.3	0.3	Class A Amplifier	100	Cath. Bias	100	4.4	10.8	250000	4300	Cath. Bias Res., 68 ohms			6BA6
								250		100	4.2	11.0	1.0	4400	Cath. Bias Res., 68 ohms			
6BA7	Pentagrid Converter ▲	B1b	8CT	H	6.3.	0.3	Converter	100	− 1.0	100	10.2	3.6	500000	Grid-No. 1 Resistor, 20000 ohms				6BA7
								250	− 1.0	100	10.0	3.8	1.0§	Conversion Transcond., 950 micromhos				

6BE6	Pentagrid Converter▲	B0	7CH	H	6.3	0.3	Converter	100 250	− 1.5 − 1.5	100 100	8.0 7.8	2.8 3.0	500000 1.0§	Grid #1 Resistor, 20000 ohms Conversion Transcond., 475 micromhos						**6BE6**
6BF6	Duplex-Diode Triode	B0	7BT	H	6.3	0.3	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6SR7.												**6BF6**
6BG6-G	Beam Power Amplifier	F1	5BT	H	6.3	0.9	Deflection Amplifier in Television Equipment	Max. Ratings: D-C Plate Volts, 500 D-C Plate Current, 100 ma. Plate Dissipation, 20 watts Typical Operation: D-C Plate and Grid #2 Supply Volts, 400 D-C Plate Current, 70 ma.												**6BG6-G**
6BH6	Sharp-Cutoff Pentode	B0	7CM	H	6.3	0.15	Class A Amplifier	100 250	− 1.0 − 1.0	100 150	1.4 2.9	3.6 7.4	700000 1.4§	3400 4600	— —	— —	—			**6BH6**
6BJ6	RF Amplifier Pentode	B0	7CM	H	6.3	0.15	Class A Amplifier	100 250	− 1.0 − 1.0	100 100	3.5 3.3	9.0 9.2	250000 1.3§	3650 3800	— —	— —	—			**6BJ6**
6C4	HF Power Triode	B0	6BQ	H	6.3	0.15	Class A Amplifier	100 250	0 − 8.5	— —	— —	11.8 10.5	6250 7700	3100 2200	19.5 17	— —	—			**6C4**
							Class C Amplifier	300	−27.0	—	—	25.0	Grid Current, 7 ma. Driving Power, 0.35 watt			—	5.5		
6C5 **6C5-GT**	Medium-Mu Triodes	B3 C3	6Q GT-6Q8	H	6.3	0.3	Class A Amplifier	250	− 8.0	—	—	8.0	10000	2000	20	—	—			**6C5** **6C5-GT**
								90▼ 300▼	Cath. Bias, 6400 ohms. Cath. Bias, 5300 ohms.	Grid Resistor,** 0.25 megohm.				Gain per stage = 11 Gain per stage = 13					
							Bias Detector	250	−17.0 approx. Plate current to be adjusted to 0.2 milliampere with no signal.											
6C6	Triple-Grid Detector Amplifier	D13	6F	H	6.3	0.3	Amplifier Detector	For other characteristics, refer to Type 6J7.												**6C6**
6C7	Duplex-Diode Triode	D9	7G	H	6.3	0.3	Triode Unit as Class A Amplifier	250	− 9.0	—	—	4.5	16000	1250	20	—	—			6C7
6C8-G	Twin-Triode Amplifier	D8	G-8Q	H	6.3	0.3	Each Unit as Amplifier	250	− 4.5	—	—	3.2	22500	1600	36	—	—			**6C8-G**
6D6	Triple-Grid Supercontrol Amplifier	D13	6F	H	6.3	0.3	Amplifier Mixer	For other characteristics, refer to Type 6U7-G.												**6D6**
6D7	Triple-Grid Detector Amplifier	D13	7H	H	6.3	0.3	Amplifier Detector	For other characteristics, refer to Type 6J7.												6D7
6D8-G	Pentagrid Converter ▲	D8	G-8A‡	H	6.3	0.15	Converter	135 250	− 3.0 − 3.0	67.5 100	1.7 2.6	1.5 3.5	600000 400000	Anode-Grid (#2): 250 ▼ max. volts, 4.3 ma. Oscillator-Grid (#1) Resistor = 50000 ohms. Conversion Transcond., 550 micromhos.						**6D8-G**
6E5	Electron-Ray Tube	D4	6R	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.												**6E5**
								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.										

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Diagram	Socket	Cathode Type and Rating: C.T.	Volts	Amps.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
6E6	Twin-Triode Power Amplifier	D12	7B	H	6.3	0.6	Push-Pull Class A Amplifier	180 250	−20.0 −27.5	——	——	Power Output is for one tube at stated plate-to-plate load.				15000 14000	0.75 1.60	6E6
6E7	Triple-Grid Supercontrol Amplifier	D13	7H	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6U7-G.										6E7
6F5	High-Mu Triode	C1	5M	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6SF5.										6F5
6F5-GT	High-Mu Triode	C3	G-5M	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6SF5.										6F5-GT
6F6	Power Pentodes	C2	7S	H	6.3	0.7	Pentode Class A Amplifier	250 285	−16.5 −20.0	250 285	6.5 7.0	34.0 38.0	80000 78000	2500 2550	——	7000 7000	3.2 4.8	6F6
							Triode‡ Class A Amplifier	250	−20.0	——	——	31.0	2600	2600	6.8	4000	0.85	
6F6-G		D10	G-7S				Pentode Push-Pull Class AB1 Amplifier	315 315	Cath. Bias −24.0	285 285	12.0◆ 12.0◆	62.0◆ 62.0◆	Cath. Bias Resistor, 320 ohms◆			10000 10000	10.5† 11.0†	6F6-G
6F6-GT		C5b	G-7S				Pentode Push-Pull Class AB1 Amplifier	375 375	Cath. Bias −26.0	250 250	8.0◆ 5.0◆	54.0◆ 34.0◆	Cath. Bias Resistor, 340 ohms◆			10000 10000	19.0† 18.5†	6F6-GT
							Triode Push-Pull‡ Class AB1 Amplifier	350 350	Cath. Bias −38.0	——	——	50.0◆ 48.0◆	Cath. Bias Resistor, 730 ohms◆			10000 6000	9.0† 13.0†	
6F7	Triode-Pentode	D9	7E	H	6.3	0.3	Triode Unit as Class A Amplifier	100	(−3.0 min.)	——	——	3.5	16000	500	8	——	——	6F7
							Pentode Unit as Class A Amplifier	100 250	(−3.0 min.)	100 100	1.6 1.5	6.3 6.3	290000 850000	1050 1100	——	——	——	
							Pentode Unit as Mixer	250	−10.0	100	0.6	2.8	Oscillator Peak Volts = 7.0. Conversion Transcond. = 300 micromhos.					
6F8-G	Twin-Triode Amplifier	D8	G-8G	H	6.3	0.6	Each Unit as Amplifier	For other characteristics, refer to Type 6J5.										6F8-G
6G6-G	Power Amplifier Pentode	D3	G-7S	H	6.3	0.15	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	6G6-G
							Triode‡ Class A Amplifier	180	−12.0	——	——	11.0	4750	2000	9.5	12000	0.25	

6H6 6H6-GT	Twin Diodes	A1a C3	7Q G-7Q11	H	6.3	0.3	Voltage Doubler Half-Wave Rectifier	Max. A-C Supply Volts per Plate (RMS), 150 Total Effect. Plate-Supply Imped. per Plate: half-wave, 30 ohms; full-wave, 15 ohms. Max. A-C Plate Volts (RMS), 150 Max. D-C Output Ma., 8 per Plate					Max. D-C Output Ma., 8. min. Min. Total Effective Plate-Supply Impedance: up to 117 volts, 15 ohms; at 150 volts, 40 ohms.					6H6 6H6-GT
6J5 6J5-GT	Medium-Mu Triodes	B3 C3	6Q GT-6Q8	H	6.3	0.3	Class A Amplifier	90 250	0 −8.0	— —	— —	10.0 9.0	6700 7700	3000 2600	20 20	— —	— —	6J5 6J5-GT
6J6	Medium-Mu Twin Triode	B9	7BF	H	6.3	0.45	Each Unit as Class A Amplifier	100	Cathode Resistor, for both units, 50 ohms			8.5	7100	5300	38	—	—	6J6
							Push-Pull Class C Amplifier	150	−10.0	Cath. Res., 220 ohms, both units		30.0	Grid Current, 16 ma. Driving Power, 0.35 watt.			—	3.5	
6J7 6J7-G 6J7-GT	Sharp-Cutoff Pentodes	C1 D8 C3	7R G-7R11 GT-7R8	H	6.3	0.3	Pentode Class A RF Amplifier	100 250	−3.0 −3.0	100 100	0.5 0.5	2.0 2.0	1.0§ 1.0 −§	1185 1225	— —	— —	— —	6J7 6J7-G 6J7-GT
							Pentode Class A AF Amplifier	90 × 300 ×	Cath. Bias, 2500 ohms. Screen Resistor = 1.2 meg. Cath. Bias, 1200 ohms. Screen Resistor = 1.2 meg.				Grid Resistor,** 0.5 megohm.			Gain per stage = 85 Gain per stage = 140	
							Pentode Bias Detector	250	−4.3	100	Cathode Current 0.43 ma.	—	Plate Resistor, 500000 ohms. Grid Resistor,** 250000 ohms.				
6J8-G	Triode-Heptode Converter	D8	G-8H	H	6.3	0.3	Triode‡-Class A Amplifier	180 250	−5.3 −8.0	— —	— —	5.3 6.5	11000 10500	1800 1900	20 20	— —	— —	6J7-GT
							Triode Unit as Oscillator	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.					6J8-G
							Heptode Unit as Mixer	100 250	−3.0 −3.0	100 100	3.0 2.9	1.4 1.3	900000 4.0§	Conversion Transcond., 260 micrombos. Conversion Transcond., 290 micrombos.				
6K5-GT	High-Mu Triode	D8	GT-5U	H	6.3	0.3	Class A Amplifier	100 250	−1.5 −3.0	— —	— —	0.35 1.1	78000 50000	900 1400	70 70	— —	— —	6K5-GT
6K6-GT	Power Amplifier Pentode	C3	G-7S1	H	6.3	0.4	Single-Tube Class A Amplifier	100 250 315	−7.0 −18.0 −21.0	100 250 250	1.6 5.5 4.0	9.0 32.0 25.5	104000 68000 75000	1500 2300 2100	— —	12000 7600 9000	0.35 3.40 4.50	6K6-GT
							Push-Pull Class A Amplifier	285 285	−25.5 Cath. Bias	285 285	9.0♣ 9.0♣	55.0♣ 55.0♣	↑ Cath. Bias Resistor, 400 ohms. ♣			12000 12000	10.5† 9.8†	
6K7 6K7-G 6K7-GT	Remote-Cutoff Pentodes	C1 D8 C3	7R G-7R1 GT-7R8	H	6.3	0.3	Class A Amplifier	100 250	−1.0 −3.0	100 125	2.7 2.6	9.5 10.5	150000 600000	1650 1650	—	—	—	6K7 6K7-G 6K7-GT
							Mixer in Superheterodyne	250	−10.0	100	—	—	Oscillator Peak Volts = 7.0					
6K8 6K8-G 6K8-GT	Triode-Hexode Converters	C1 D8 C7a	8K G-8K1 GT-8K8	H	6.3	0.3	Triode Unit as Oscillator	100	Triode-Grid Resistor, 50000 ohms			3.8	Triode-Grid & Hexode-Grid Current, 0.15 ma.					6K8 6K8-G 6K8-GT
							Hexode Unit as Mixer	100 250	−3.0 −3.0	100 100	6.2 6.0	2.3 2.5	400000 600000	Conversion Transcond., 325 micrombos. Conversion Transcond., 350 micrombos.				

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Diagram	Socket Connections: S.C.	Cathode Type and Rating: C.T.	Cathode Type and Rating: Volts	Cathode Type and Rating: Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
6L5-G	Detector Amplifier Triode	D3	G-4Q‡	H	6.3	0.15	Class A Amplifier	135 250	− 5.0 − 9.0	——	——	3.5 8.0	11300 9000	1500 1900	17 17	——	——	6L5-G
6L6 6L6-G	Beam Power Amplifiers	D7 E2	7AC G-7AC‡	H	6.3	0.9	Single-Tube Class A Amplifier	250 250	−14.0 Cath. Bias	250 250	5.0 5.4	72.0 75.0	—— Cath. Bias Resistor, 170 ohms.	——	——	2500 2500	6.5 6.5	6L6 6L6-G
							Push-Pull Class A Amplifier	270 270	−17.5 Cath. Bias	270 270	11.0◆ 11.0◆	134.0◆ 134.0◆	—— Cath. Bias Resistor, 125 ohms.◆	——	——	5000 5000	17.5‡ 18.5‡	
							Push-Pull Class AB1 Amplifier	360 360	−22.5 Cath. Bias	270 270	5.0◆ 5.0◆	88.0◆ 88.0◆	—— Cath. Bias Resistor, 250 ohms.◆	——	——	6600 9000	26.5‡ 24.5‡	
							Push-Pull Class AB2 Amplifier	360 360	−18.0 −22.5	225 270	3.5◆ 5.0◆	78.0◆ 88.0◆	—— ——	——	——	6000 3800	31.0‡ 47.0‡	
							Single Triode□ Class A Amplifier	250 250	−20.0 Cath. Bias	——	——	40.0 40.0	1700 Cath. Bias Resistor, 490 ohms.	4700	8.0	5000 6000	1.4 1.3	
6L7 6L7-G	Pentagrid Mixer‡A	C1 D8	7T G-7T‡	H	6.3	0.3	Mixer in Superheterodyne	250	− 3.0	100	7.1	2.4	Oscillator-Grid (# 3) Bias, −10 volts. Grid # 3 Peak Swing, 12 volts minimum. Conversion Transcond., 375 micromhos.					6L7 6L7-G
							Class A Amplifier	250	− 3.0◆	100	6.5	5.3	600000	1100	——	——	——	
6N6-G	Direct-Coupled Power Amplifier	D10	G-7AU	H	6.3	0.8	Class A Amplifier	Output Triode: Plate Volts, 300; Plate Ma., 45; Load, 7000 ohms. Triode: Plate Volts, 300; Grid Volts, 0; A-F Signal Volts (Peak), 21; Plate Ma., 8							Input		4.0	6N6-G
6N7 6N7-GT	High-Mu Twin Power Triodes	C2 C3	8B G-8B‡	H	6.3	0.8	Class A Amplifier (as Driver)*	250 294	− 5.0 − 6.0	——	——	6.0 7.0	11300 11000	3100 3200	35 35	20000 or more	exceeds 0.4	6N7
							Class B Amplifier	300	0	——	——	Power Output is for one tube at stated plate-to-plate load.				8000	10.0	6N7-GT
6P5-GT	Detector Amplifier Triode	C3	G-6Q‡	H	6.3	0.3	Amplifier Detector	For other characteristics, refer to Type 76.										6P5-GT
6P7-G	Triode-Pentode	D8	G-7U	H	6.3	0.3	Amplifier and Converter	For other characteristics, refer to Type 6F7.										6P7-G
6Q7 6Q7-G 6Q7-GT	Twin-Diode High-Mu Triodes	C1 D8 C3	7V G-7V‡ GT-7V‡	H	6.3	0.3	Triode Unit as Class A Amplifier	100 250 90▫ 300▫	− 1.0 − 3.0 Cath. Bias, 7500 ohms. Cath. Bias, 3000 ohms.	—— —— Grid Resistor,** 0.5 megohm.	—— ——	0.8 1.1	58000 58000	1200 1700	70 70	—— Gain per stage = 32 Gain per stage = 45	——	6Q7 6Q7-G 6Q7-GT

6R7 6R7-G 6R7-GT	Twin-Diode Medium-Mu Triodes	C1 D8 C3	7V G-7V‡ G-7V‡	H	6.3	0.3	Triode Unit as Class A Amplifier	250	– 9.0	—	—	9.5	8500	1900	15	—	—	6R7 6R7-G 6R7-GT
								90▽ 300▽	Cath. Bias, 4400 ohms. Cath. Bias, 3800 ohms.			Grid Resistor,** 0.25 megohm.			Gain per stage = 10 Gain per stage = 10		
6S7 6S7-G	Remote-Cutoff Pentodes	C1 D8	7R G-7R‡	H	6.3	0.15	Class A Amplifier	135 250	– 3.0 – 3.0	67.5 100	0.9 2.0	3.7 8.5	1.0§ 1.0§	1250 1750	—	—	—	6S7 6S7-G
6S8-GT	Triple-Diode Triode	C7b	8C8	H	6.3	0.3	Triode Unit as Class A Amplifier	100 250	– 1.0 – 2.0	—	—	0.4 0.9	110000 91000	900 1100	100 100	—	—	6S8-GT
6SA7	Pentagrid Converter▲	B3	8R	H	6.3	0.3	Mixer	100 250	Self-Excited	100 100	8.5 8.5	3.3 3.5	500000 1.0§	Grid # 1 Resistor, 20000 ohms. Conversion Transcond., 450 micromhos.				6SA7
6SA7-GT	Pentagrid Converter▲	C3	G-8AD	H	6.3	0.3	Mixer	For other characteristics, refer to Type 6SA7.										6SA7-GT
6SB7-Y	Pentagrid Converter▲	B3	8R	H	6.3	0.3	Mixer	100 250	– 1.0 – 1.0	100 100	10.2 10.0	3.6 3.8	500000 1.0§	Grid # 1 Resistor, 20000 ohms Conversion Transcond., 950 micromhos				6SB7-Y
6SC7	Twin-Triode Amplifier	B3	8	H	6.3	0.3	Each Unit as Amplifier	250	– 2.0	—	—	2.0	53000	1325	70	—	—	6SC7
6SF5 6SF5-GT	High-Mu Triodes	B3 C3	6AB G-6AB‡	H	6.3	0.3	Class A Amplifier	100 250	– 1.0 – 2.0	—	—	0.4 0.9	85000 66000	1150 1500	100 100	—	—	6SF5 6SF5-GT
								90✕ 300✕	Cath. Bias, 8500 ohms. Cath. Bias, 3200 ohms.			Grid Resistor,** 0.5 megohm.			Gain per stage = 43 Gain per stage = 63		
6SF7	Diode-Remote-Cutoff Pentode	B3	7AZ	H	6.3	0.3	Pentode Unit as Class A Amplifier	100 250	– 1.0 – 1.0	100 100	4.3 4.1	13.5 13.9	200000 700000	1975 2050	—	—	—	6SF7
6SG7	Semi-Remote-Cutoff Pentode	B3	8BK	H	6.3	0.3	Class A Amplifier	100 250 250	– 1.0 – 1.0 – 2.5	100 125 150	3.2 4.4 3.4	8.2 11.8 9.2	250000 900000 1.0+§	4100 4700 4000	—	—	—	6SG7
6SH7	Sharp-Cutoff Pentode	B3	8BK	H	6.3	0.3	Class A Amplifier	100 250	– 1.0 – 1.0	100 150	2.1 4.1	5.3 10.8	350000 900000	4000 4900	—	—	—	6SH7
6SJ7 6SJ7-GT	Sharp-Cutoff Pentodes	B3 C3	8N GT-8N‡	H	6.3	0.3	Class A Amplifier	100 250	– 3.0 – 3.0	100 100	0.9 0.8	2.9 3.0	700000 1.0+§	1575 1650	—	—	—	6SJ7 6SJ7-GT
								90✕ 300✕	Cath. Bias, 1700 ohms. Cath. Bias, 860 ohms.			Grid Resistor,** 0.5 megohm.			Gain per stage = 93 Gain per stage = 167		
6SK7 6SK7-GT	Remote-Cutoff Pentodes	B3 C3	8N GT-8N‡	H	6.3	0.3	Class A Amplifier	100 250	– 1.0 – 3.0	100 100	4.0 2.6	13.0 9.2	120000 800000	2350 2000	—	—	—	6SK7 6SK7-GT
6SL7-GT	Twin-Triode Amplifier	C3	8BD	H	6.3	0.3	Each Unit as Amplifier	250	– 2.0	—	—	2.3	44000	1600	70	—	—	6SL7-GT
6SN7-GT	Twin-Triode Amplifier	C3	8BD	H	6.3	0.6	Each Unit as Amplifier	For other characteristics, refer to Type 6J5.										6SN7-GT

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	Use (Values to right give operating conditions and characteristics for indicated typical use)	Plate Supply Volts	Grid Bias as Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	Type
6SQ7 6SQ7-GT	Twin-Diode High-Mu Triodes	B3 C3	8Q GT-8Q‖	H	6.3	0.3	Triode Unit as Class A Amplifier	100 250	− 1.0 − 2.0	— —	— —	0.4 0.9	110000 91000	900 1100	100 100	— —	— —	6SQ7 6SQ7-GT
								90 ✕ 300 ✕	Cath. Bias, 11000 ohms. Cath. Bias, 3900 ohms.			Grid Resistor, ** 0.5 megohm.				Gain per stage = 40 Gain per stage = 53		
6SR7	Duplex-Diode Triode	B3	8Q	H	6.3	0.3	Triode Unit as Class A Amplifier	250	− 9.0	—	—	9.5	8500	1900	16	10000	0.3	6SR7
6SS7	Triple-Grid Supercontrol Amplifier	B3	8N	H	6.3	0.15	Class A Amplifier	100 250	− 1.0 − 3.0	100 100	3.1 2.0	12.2 9.0	120000 1.0§	1930 1850	—	—	—	6SS7
6ST7	Duplex-Diode Triode	B3	8Q	H	6.3	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6SR7.										6ST7
6SZ7	Duplex-Diode High-Mu Triode	B3	8Q	H	6.3	0.15	Triode Unit as Class A Amplifier	100 250	− 1.0 − 3.0	— —	— —	0.8 1.0	61000 58000	1150 1200	70 70	— —	— —	6SZ7
6T7-G	Duplex-Diode High-Mu Triode	D8	G-7V‡	H	6.3	0.19	Triode Unit as Class A Amplifier	135 250	− 1.5 − 3.0	— —	— —	0.9 1.2	65000 62000	1000 1050	65 65	— —	— —	6T7-G
								90 ✕ 300 ✕	Cath. Bias, 8300 ohms. Cath. Bias, 4500 ohms.			Grid Resistor,** 0.5 megohm.				Gain per stage = 30 Gain per stage = 40		
6T8	Triple-Diode Triode	B0a	9E	H	6.3	0.45	Triode Unit as Class A Amplifier	100 250	− 1.0 − 3.0	— —	— —	0.8 1.0	—— ——	1300 1200	70 70	— —	— —	6T8
6U5/6G5	Electron-Ray Tube	D4	8R	H	6.3	0.3	Visual Indicator	Plate & Target Supply = 125 volts. Triode Plate Resistor = 0.3 meg. Target Current = 1.0 ma. Grid Bias, −8 volts; Shadow Angle, 0°. Bias, 0 volts; Angle, 90°; Plate Current, 0.19 ma.										6U5/6G5
6U7-G	Triple-Grid Supercontrol Amplifier	D12a	G-7R‡	H	6.3	0.3	Plate & Target Supply = 250 volts. Triode Plate Resistor = 1.0 meg. Target Current = 4.0 ma. Grid Bias, −22 volts; Shadow Angle, 0°. Bias, 0 volts; Angle, 90°. Plate Current, 0.24 ma.											6U7-G
							Class A Amplifier	100 250	− 3.0 − 3.0	100 100	2.2 2.0	8.0 8.2	250000 800000	1500 1600	——	— —	— —	
							Mixer in Superheterodyne	100 250	−10.0 −10.0	100 100	— —	— —	—— ——	Oscillator Peak Volts = 7.0				
6V6 6V6-GT	Beam Power Amplifiers	C2 C3	7AC G-7AC‡	H	6.3	0.45	Single-Tube Class A Amplifier	180 250 315	− 8.5 −12.5 −13.0	180 250 225	3.0 4.5 2.2	29.0 45.0 34.0	58000 52000 77000	3700 4100 3750	—— —— ——	5500 5000 8500	2.0 4.5 5.5	6V6
							Push-Pull Class AB1 Amplifier	250 285	−15.0 −19.0	250 285	5.0◆ 4.0◆	70.0◆ 70.0◆	—— ——	—— ——	—— ——	10000 8000	10.0† 14.0†	6V6-GT

6V7-G	Duplex-Diode Triode	D8	G-7V‡	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 85.										6V7-G
6W4-GT	Half-Wave Rectifier	C3	4CG	H	6.3	1.2	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 350 Max. Peak Inverse Volts 2000		1250		Max. D-C Output Ma., 100 Max. Peak Plate Ma., 600		Min. Total Effect. Supply Imped. per Plate, 145 ohms.				6W4-GT
6W7-G	Triple-Grid Detector Amplifier	D8	G-7R‡	H	6.3	0.15	Class A Amplifier	250	– 3.0	100	0.5	2.0	1.5§	1225	——	——	——	6W7-G
6X4	Full-Wave Rectifier	B1a	5BS	H	6.3	0.6	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 325 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 210		Min. Total Effect. Supply Imped. per Plate, 150 ohms				6X4
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 210		Min. Value of Input Choke, 8 henries				
6X5 6X5-GT	Full-Wave Rectifiers	C2 C3	6S G-6S‡	H	6.3	0.6	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 325 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 210		Min. Total Effect. Supply Imped. per Plate, 150 ohms				6X5 6X5-GT
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 210		Min. Value of Input Choke, 8 henries				
6Y5	Full-Wave Rectifier	D5	6J	H	6.3	0.8	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 350 Max. D-C Output Ma., 50										6Y5
6Y6-G	Beam Power Amplifier	D10	G-7AC‡	H	6.3	1.25	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	6Y6-G
6Y7-G	Twin-Triode Amplifier	D3	G-5G‡	H	6.3	0.6	Class B Amplifier	For other characteristics, refer to Type 79.										6Y7-G
6Z5	Full-Wave Rectifier	D5	6K	H	6.3 12.6	0.8 0.4	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 230 Max. D-C Output Ma., 60										6Z5
6Z7-G	Twin-Triode Amplifier	D3	G-5S‡	H	6.3	0.3	Class B Amplifier	135 180	0 0	——	——	Power Output is for one tube at stated plate-to-plate load.				9000 12000	2.5 4.2	6Z7-G
6ZY5-G	Full-Wave Rectifier	D3	G-6S‡	H	6.3	0.3	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 325 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 40 Max. Peak Plate Ma., 120		Min. Total Effect. Supply Imped. per Plate, 225 ohms				6ZY5-G
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 40 Max. Peak Plate Ma., 120		Min. Value of Input Choke, 13.5 henries				
7A4	Detector Amplifier Triode	B8	6AC2	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6J5.										7A4
7A5	Beam Power Amplifier	C8	6AA	H	6.3	0.75	Class A Amplifier	110 125	– 7.5 – 9.0	110 125	3.0 3.3	40.0 44.0	14000 17000	5800 6000	——	2500 2700	1.5 2.2	7A5
7A6	Twin Diode	B5	7AJ	H	6.3	0.15	Detector Rectifier	Maximum A-C Voltage per Plate ..... 150 Volts, RMS Maximum D-C Output Current per plate ..... 8 Milliamperes										7A6
7A7	Triple-Grid Supercontrol Amplifier	B6	6V	H	6.3	0.3	Class A Amplifier	For other characteristics, refer to Type 6SK7.										7A7

Discontinued types are shown in light face.

For types added subsequent to mid '40, see Chart II, Page 46.

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	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	Transconductance (Grid-plate) umhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
7A8	Octode Converter	B5	8U	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 k max. volts, 4.2 ma. Oscillator-Grid (#1) Resistor ∞. Conversion Transcond., 550 micromhos.				7A8
7AF7	Medium-Mu Twin Triode	B5	8AC	H	6.3	0.3	Each Unit as Class A Amplifier	250 100	−10 0	— —	— —	9.0 10.8	7600 6500	2100 2600	16 17	— —	— —	7AF7
7AG7	Sharp-Cutoff Pentode	B5	8V	H	6.3	0.15	Class A Amplifier	250	Cath. Bias	250	2.0	6.0	750000	4200	Cathode-Bias Resistor, 250 ohms			7AG7
7B4	High-Mu Triode	B5	5AC1	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6SF5.										7B4
7B5	Power Amplifier Pentode	C8	8AE	H	6.3	0.4	Class A Amplifier	For other characteristics, refer to Type 6K6-GT.										7B5
7B6	Duplex-Diode High-Mu Triode	B5	8W	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.										7B6
7B7	Triple-Grid Supercontrol Amplifier	B5	8V	H	6.3	0.15	Class A Amplifier	250	− 3.0	100	1.7	8.5	750000	1750	—	—	—	7B7
7B8	Pentagrid Converter	B5	8X	H	6.3	0.3	Converter	For other characteristics, refer to Type 6A8.										7B8
7C5	Beam Power Amplifier	C8	6AA	H	6.3	0.45	Class A Amplifier	For other characteristics, refer to Type 6V6-GT.										7C5
7C6	Duplex-Diode High-Mu Triode	B5	8W	H	6.3	0.15	Triode Unit as Class A Amplifier	250	− 1.0	—	—	1.3	100000	1000	100	—	—	7C6
7C7	Triple-Grid Detector Amplifier	B5	8V	H	6.3	0.15	Class A Amplifier	100 250	− 3.0 − 3.0	100 100	0.4 0.5	1.8 2.0	1.2M 2.0M	1225 1300	—	—	—	7C7
7DP4	Directly Viewed Kinescope	11	12C	H	6.3	0.6	Picture Reproduction	Focus: Electrostatic Deflection: Magnetic Deflection Angle: 50° Phosphor: No. 4 Picture Size: 4″ x 5¼″ Uses Ion-Trap Magnet		Anode-No. 2 Volts, 8000 (max.) Anode-No. 1 Volts for Focus, 1216 to 1644 (2400 max.) Grid-No. 2 Volts, 250 (410 max.) Grid-No. 1 Volts for Visual Cutoff, −27 to −63				Anode-No. 1 Current Range, −15 to +10 microamperes Ion-Trap Magnet Current, 70 approx. ma. (dc) Deflection Coil Current, 410 approx. ma. (dc)			7DP4
7E6	Duplex-Diode Triode	B5	8W	H	6.3	0.3	Triode Unit as Amplifier	For other characteristics, refer to Type 6R7.										7E6

7E7	**Duplex-Diode Pentode**	B5	8AE	H	6.3	0.3	Pentode Unit as Class A Amplifier	100 250	− 1.0 − 3.0	100 100	2.7 1.6	10.0 7.5	150000 700000	1600 1300	—	—	—	**7E7**
7F7	**Twin-Triode Amplifier**	B5	8AC	H	6.3	0.3	Each Unit as Amplifier	For other characteristics, refer to Type 6SL7-GT.										**7F7**
7F8	**Twin-Triode Amplifier**	B9b	8BW	H	6.3	0.3	Each Unit as Class A Amplifier	250	Cathode-Bias Res., 500 ohms			6.0	—	3300	48	—	—	**7F8**
7G7/ 1232	**Television Amplifier Pentode**	B5	8V	H	6.3	0.45	Class A Amplifier	250	− 2.0	100	2.0	6.0	800000	4500	—	—	—	**7G7/ 1232**
7GP4	**Directly Viewed Kinescope**	f1a	14G4	H	6.3	0.6	Picture Reproduction	Anode-No. 2 and Grid-No. 2 Volts, 4000 (max.) Anode-No. 1 Volts for Focus, 1080 to 1600 Grid-No. 1 Volts for Visual Cutoff, 48 to 112						For other characteristics, refer to Type 7JP4.				7GP4
7H7	**Triple-Grid Supercontrol Amplifier**	B5	8V	H	6.3	0.3	Class A Amplifier	100 250	− 1.0 − 2.5	100 150	3.3 3.5	8.2 9.5	250000 800000	3800 3800	—	—	—	**7H7**
7J7	**Triode-Heptode Converter**	B5	8BL	H	6.3	0.3	Triode Unit as Oscillator	100 250 a	Triode-Grid Resistor, 50000 ohms			3.2 5.0	Triode-Grid & Heptode-Grid Current, 0.3 ma. Triode-Grid & Heptode-Grid Current, 0.4 ma.					**7J7**
							Heptode Unit as Mixer	100 250	− 3.0 − 3.0	100 100	2.6 2.8	1.5 1.5§	500000 500000	Conversion Transcond., 280 micromhos. Conversion Transcond., 290 micromhos.				
7JP4	**Directly Viewed Kinescope**	f1a	14G1	H	6.3	0.6	Picture Reproduction	Focus: Electrostatic Deflection: Electrostatic Phosphor: No. 4 Picture Size: 4″ x 5½″ Deflection Factors: D_1 and D_3 (nearer screen), 31 to 41 vdc/in./kv; D_2 and D_4 (nearer base), 25 to 34 vdc/in./kv				Anode-No. 2 and Grid-No. 2 Volts, 6000 (max.) Anode-No. 1 Volts for Focus, 1620 to 2400 (2500 max.) Anode-No. 1 Current Range, −15 to + 10 microamperes Grid-No. 1 Volts for Visual Cutoff, −72 to −168					**7JP4**
7L7	**RF Amplifier Pentode**	B5	8V	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 1.0§	3000 3100	—	—	—	**7L7**
7N7	**Twin-Triode Amplifier**	C6	8AC	H	6.3	0.6	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SN7-GT										**7N7**
7Q7	**Pentagrid Converter▲**	B9	8AL	H	6.3	0.3	Converter	100 250	− 2.0 − 2.0	100 100	8.5 8.5	3.3 3.5	500000 1.0§	Grid #1 Resistor, 20000 ohms. Conversion Transcond., 550 micromhos.				**7Q7**
7R7	**Duplex-Diode Pentode**	B5	8AE	H	6.3	0.3	Pentode Unit as Class A Amplifier	100 250	− 1.0 − 1.0	100 100	2.2 1.6	5.5 6.2	350000 1.0§	3000 3400	—	—	—	**7R7**
7S7	**Triode-Heptode Converter**	B5	8BL	H	6.3	0.3	Triode Unit as Oscillator	100 250	Triode-Grid Resistor, 50000 ohms			3.0 5.0	Triode-Grid & Heptode-Grid Current, 0.3 ma. Triode-Grid & Heptode-Grid Current, 0.4 ma.					**7S7**
							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 micromhos. Conversion Transcond., 525 micromhos.				
7V7	**RF Amplifier Pentode**	B5	8V	H	6.3	0.45	Class A Amplifier	300	—	150	3.9	10.0	300000	5800	Cath. Bias Res., 160 ohms			**7V7**

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
		Dimen.	S. C.	C. T.	Volts	Amp.												
7W7	RF Amplifier Pentode	B5	8BJ	H	6.3	0.45	Class A Amplifier	For other characteristics, refer to Type 7V7.										7W7
7X7	Twin Diode-High-Mu Triode	B5	8BZ	H	6.3	0.3	Triode Unit as Class A Amplifier	100 250	0 − 1.0	——	——	1.2 1.9	85000 67000	1000 1500	85 100	——	——	7X7
7Y4	Full-Wave Rectifier	B5	5AB	H	6.3	0.5	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 325 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 180				Min. Total Effect. Supply Imped. per Plate, 150 ohms.		7Y4
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 180				Min. Value of Input Choke, 10 henries		
7Z4	Full-Wave Rectifier	C8	5AB	H	6.3	0.9	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 325 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 100 Max. Peak Plate Ma., 300				Min. Total Effec. Supply Imped. per Plate, 75 ohms		7Z4
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 100 Max. Peak Plate Ma., 300				Min. Value of Input Choke, 6 henries		
9AP4	Directly Viewed Kinescope	K1	6AL	H	2.5	2.1	Picture Reproduction	Focus: Electrostatic Deflection: Magnetic Phosphor: No. 4 Picture Size: 5¾" x 7¼"		Anode-No. 2 Volts, 7000 (max.) Anode-No. 1 Volts for Focus, 1192 to 1788 (2000 max.) Grid-No. 2 Volts, 250 (300 max.)				Grid-No. 1 Volts for Visual Cutoff, −20 to −60 Grid-No. 1 Signal Voltage, (Peak-to-Peak) value, 30 volts approx.				9AP4
10	Power Amplifier Triode	E3	4D	F	7.5	1.25	Class A Amplifier	350 425	−32.0 −40.0	——	——	16.0 18.0	5150 5000	1550 1600	8.0 8.0	11000 10200	0.9 1.6	10
10BP4	Directly Viewed Kinescope	J1	12D	H	6.3	0.6	Picture Reproduction	Focus: Magnetic Deflection: Magnetic Deflection Angle: 50° Phosphor: No. 4 Picture Size: 6" x 8" Uses Ion-Trap Magnet		Anode Volts, 10000 (max.) Grid-No. 2 Volts, 250 (450 max.) Grid-No. 1 Volts for Visual Cutoff, −27 to −63 Grid-No. 1 Circuit Resistance, 1.5 megohms (max.)				Focusing Coil Current, 115 approx. ma. (dc) Ion-Trap Magnet Current, 109 approx. ma. (dc) Deflection Coil Current, 470 approx. ma. (dc)				10BP4
11 12	Detector★ Amplifier Triode	D2 D11	4F 4D	D.C. F	1.1	0.25	Class A Amplifier	90 135	− 4.5 −10.5	——	——	2.5 3.0	● 15500 15000	425 440	6.6 6.6	——	——	11 12
12A5	Power Amplifier Pentode	D5	7F	H	6.3 12.6	0.6 0.3	Class A Amplifier	100 180	−15.0 −25.0	100 180	3.0 8.0	17.0 45.0	50000 35000	1700 2400	——	4500 3300	0.8 3.4	12A5

12A7	Rectifier-Pentode	D9	7K	H	12.6	0.3	Pentode Unit as Class A Amplifier	135	−13.5	135	2.5	9.0	102000	975	——	13500	0.55	**12A7**
							Half-Wave Rectifier	Maximum A-C Plate Voltage.....125 Volts, RMS Maximum D-C Output Current.....30 Milliamperes										
12A8-GT	Pentagrid Converter ø	C3	GT-8A8	H	12.6	0.15	Converter	For other characteristics, refer to Type 6A8.										**12A8-GT**
12AH7-GT	Twin Triode	C0	8BE	H	12.6	0.15	Each Unit as Class A Amplifier	100 180	−3.6 −6.5	——	——	3.7 7.6	10300 8400	1550 1900	16 16	——	——	**12AH7-GT**
12AL5	Twin-Diode	A1	8BT	H	12.6	0.15	Detector Rectifier	For other characteristics, refer to Type 6AL5.										**12AL5**
12AP4	Directly Viewed Kinescope	L1	6AL	H	2.5	2.1	Picture Reproduction	Focus: Electrostatic Deflection: Magnetic Phosphor: No. 4 Picture Size: 7⅜" x 9¾"		Anode-No. 2 Volts, 7000 (max.) Anode-No. 1 Volts for Focus, 1192 to 1788 (2000 max.) Grid-No. 2 Volts 250 (300 max.)				Grid-No. 1 Volts for Visual Cutoff, −20 to −60 Grid-No. 1 Signal Voltage, (Peak-to-Peak) value, 30 volts approx.				**12AP4**
12AT6	Duplex-Diode High-Mu Triode	B0	7BT	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6AT6.										**12AT6**
12AT7	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	——	——	3.7 10.0	——	4000 5500	54 55	——	——	**12AT7**
12AU6	RF Amplifier Pentode	B0	7BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6AU6.										**12AU6**
12AU7	Twin-Triode Amplifier	B0a	9A	H	6.3 12.6	0.3 0.15	Each Unit As Class A Amplifier	100 250	0 −8.5	——	——	11.8 10.5	6250 7700	3100 2200	19.5 17	——	——	**12AU7**
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.										**12AV6**
12AW6	RF Amplifier Pentode	B0	7CM	H	12.6	0.15	As Pentode Class A Amplifier As Triode □ Class A Amplifier	For other characteristics, refer to Type 6AG5.										**12AW6**
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	100 100	——	——	**12AX7**
12B8-GT	Triode-Pentode	C7a	8T	H	12.6	0.3	Triode Unit as Class A Amplifier	90	0	——	——	2.8	37000	2400	90	——	——	12B8-GT
							Pentode Unit as Class A Amplifier	90	−3.0	90	2.0	7.0	200000	1800	——	——	——	
12BA6	RF Amplifier Pentode	B0	7BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6BA6.										**12BA6**
12BA7	Pentagrid Converter ø	B1b	8CT	H	12.6	0.3	Converter	For other characteristics, refer to Type 6BA7.										**12BA7**

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
		Diagram	S. C.	C. T.	Volts	Amp.												
12BE6	Pentagrid Converter▲	B2	7CH	H	12.6	0.15	Converter	For other characteristics, refer to Type 6BE6.										12BE6
12C8	Duplex-Diode Pentode	C1	8E	H	12.6	0.15	Pentode Unit as RF Amplifier	250	— 3.0	125	2.3	10.0	600000	1325	——	——	——	12C8
							Pentode Unit as AF Amplifier	90 ☒ Cath. Bias, 3500 ohms. Screen Resistor = 1.1 meg. / 300 ☒ Cath. Bias, 1600 ohms. Screen Resistor = 1.2 meg.						Grid Resistor,** 0.5 megohm.		Gain per stage = 55 / Gain per stage = 79		
12F5-GT	High-Mu Triode	C3	G-5M‡	H	12.6	0.15	Amplifier	For other characteristics, refer to Type 6SF5.										12F5-GT
12H6	Twin-Diode	A1	7Q	H	12.6	0.15	Detector Rectifier	For other ratings, refer to Type 6H6.										12H6
12J5-GT	Detector Amplifier Triode	C3	GT-6Q‡	H	12.6	0.15	Amplifier	For other characteristics, refer to Type 6J5.										12J5-GT
12J7-GT	Triple-Grid Detector Amplifier	C3	GT-7R▲	H	12.6	0.15	Amplifier	For other characteristics, refer to Type 6J7.										12J7-GT
12K7-GT	Triple-Grid Supercontrol Amplifier	C3	GT-7R▲	H	12.6	0.15	Amplifier	For other characteristics, refer to Type 6K7.										12K7-GT
12K8	Triode-Hexode Converter	C1	8K	H	12.6	0.15	Oscillator Mixer	For other characteristics, refer to Type 6K8.										12K8
12Q7-GT	Duplex-Diode High-Mu Triode	C3	GT-7V▲	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6Q7.										12Q7-GT
12SA7	Pentagrid Converter▲	B3	8R	H	12.6	0.15	Mixer	For other characteristics, refer to Type 6SA7.										12SA7
12SA7-GT	Pentagrid Converter▲	C3	G-8AD	H	12.6	0.15	Mixer	For other characteristics, refer to Type 6SA7.										12SA7-GT
12SC7	Twin-Triode Amplifier	B3	8S	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SC7.										12SC7
12SF5	High-Mu Triode	B3	8AB	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SF5.										12SF5
12SF5-GT	High-Mu Triode	C3	G-8AB‡	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SF5.										12SF5-GT

12SF7	Diode-Remote-Cutoff Pentode	B2	7AZ	H	12.6	0.15	Pentode Unit as Amplifier	For other characteristics, refer to Type 6SF7.										**12SF7**
12SG7	Semi-Remote-Cutoff Pentode	B3	8BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SG7.										**12SG7**
12SH7	Sharp-Cutoff Pentode	B3	8BK	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SH7.										**12SH7**
12SJ7 **12SJ7-GT**	Sharp-Cutoff Pentodes	B3 C3	8N GT-8N	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SJ7.										**12SJ7** **12SJ7-GT**
12SK7 **12SK7-GT**	Remote-Cutoff Pentodes	B3 C3	8N GT-8N	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SK7.										**12SK7** **12SK7-GT**
12SL7-GT	Twin-Triode Amplifier	C3	8BD	H	12.6	0.15	Each Unit as Amplifier	For other characteristics, refer to Type 6SL7-GT.										**12SL7-GT**
12SN7-GT	Twin-Triode Amplifier	C3	8BD	H	12.6	0.3	Each Unit as Amplifier	For other characteristics, refer to Type 6J5.										**12SN7-GT**
12SQ7	Duplex-Diode High-Mu Triode	B3	8Q	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.										**12SQ7**
12SQ7-GT	Duplex-Diode High-Mu Triode	C3	GT-8Q	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6SQ7.										**12SQ7-GT**
12SR7	Duplex-Diode Triode	B3	8Q	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6SR7.										**12SR7**
12SR7-GT	Duplex-Diode Triode	C3	GT-8Q	H	12.6	0.15	Triode Unit as Amplifier	For other characteristics, refer to Type 6SR7										**12SR7-GT**
12Z3	Half-Wave Rectifier	D5	4G	H	12.6	0.3	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 235 Max. D-C Output Ma., 55					Min. Total Effective Plate-Supply Impedance: Up to 117 volts, 0 ohms; at 150 volts, 30 ohms; at 235 volts, 75 ohms.					**12Z3**
14A4	Detector Amplifier Triode	B8	8AC	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6J5.										**14A4**
14A5	Beam Power Amplifier	B8	8AA	H	12.6	0.15	Class A Amplifier	250	−12.5	250	3.5	30	70000	3000	——	7500	2.8	**14A5**
14A7/12B7	Triple-Grid Supercontrol Amplifier	B8	8V	H	12.6	0.15	Class A Amplifier	100 250	− 1.0 − 3.0	100 100	4.0 2.6	13.0 9.2	120000 800000	2350 2000	——	——	——	**14A7/12B7**
14AF7	Medium-Mu Twin Triode	B8	8AC	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 7AF7.										**14AF7**
14B6	Duplex-Diode High-Mu Triode	B8	8W	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6SQ7.										**14B6**

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Diman.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
14B8	Pentagrid Converter ⊘	B5	8X	H	12.6	0.15	Converter	For other characteristics, refer to Type 6A8.										14B8
14C7	Triple-Grid Detector Amplifier	B5	8V	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6SJ7.										14C7
14E6	Duplex-Diode Triode	B5	8W	H	12.6	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6SR7.										14E6
14F7	Twin-Triode Amplifier	B5	8AC	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SL7-GT.										14F7
14H7	Triple-Grid Supercontrol Amplifier	B5	8V	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 7H7.										14H7
14J7	Triode-Heptode Converter	B5	8BL	H	12.6	0.15	Converter	For other characteristics, refer to Type 7J7.										14J7
14N7	Twin-Triode Amplifier	C8	8AC	H	12.6	0.3	Each Unit as Class A Amplifier	For other characteristics, refer to Type 6SN7-GT.										14N7
14Q7	Pentagrid Converter ▲	B5	8AL	H	12.6	0.15	Converter	For other characteristics, refer to Type 6SA7.										14Q7
14R7	Duplex-Diode Pentode	B5	8AE	H	12.6	0.15	Pentode Unit as Class A Amplifier	For other characteristics, refer to Type 7R7.										14R7
15	RF Amplifier Pentode	D8	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	—	—	—	15
19	Twin-Triode Amplifier	D5	8C	D.C. F	2.0	0.26	Amplifier	For other characteristics, refer to Type 1J6-G.										19
19T8	Triple-Diode Triode	B0a	9E	H	18.9	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6T8.										19T8

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	20
22	RF Amplifier Tetrode	E1	4K	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	——	——	——	22
24-A	RF Amplifier Tetrode	E1	5E	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 1050	——	——	——	**24-A**
							Bias Detector	250●	− 5.0 approx.	20 to 45	——	Plate current to be adjusted to 0.1 milliampere with no signal.						
25A6	Power Amplifier Pentode	C2	7S	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	**25A6**
25A6-GT	Power Amplifier Pentode	C3	G-7S‡	H	25.0	0.3	Class A Amplifier	For other characteristics, refer to Type 25A6.										25A6-GT
25A7-GT	Rectifier Pentode	C3	8F	H	25.0	0.3	Pentode Unit as Class A Amplifier	100	−15.0	100	4.0	20.5	50000	1800	——	4500	0.77	25A7-GT
							Half-Wave Rectifier	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350				Max. D-C Output Ma., 75 Max. Peak Plate Ma., 450			Min. Total Effect. Supply Impedance, 15 ohms.		
25AC5-GT	High-Mu Power Amplifier Triode	C3	G-4Q‡	H	25.0	0.3	Class B Amplifier	180	0	——	——	4.0◆	——	——	——	4800	6.0	25AC5-GT
							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.							2000	2.0	
25B5	Direct-Coupled Power Amplifier	D8s	8D	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 25N6-G.										25B5
25B6-G	Power Amplifier Pentode	D10	G-7S‡	H	25.0	0.3	Class A Amplifier	105 200	−16.0 −23.0	105 135	2.0 1.8	48.0 62.0	15500 18000	4800 5000	——	1700 2500	2.4 7.1	25B6-G
25B8-GT	Triode-Pentode	C3	8T	H	25.0	0.15	Triode Unit as Class A Amplifier	100	− 1.0	——	——	0.6	75000	1500	112	——	——	25B8-GT
							Pentode Unit as Class A Amplifier	100	− 3.0	100	2.0	7.6	185000	2000	——	——	——	
25C6-G	Beam Power Amplifier	D10	G-7AC‡	H	25.0	0.3	Class A Amplifier	For other characteristics, refer to Type 6Y6-G.										25C6-G
25L6	Beam Power Amplifier	C2	7AC	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 50L6-GT.										**25L6**
25L6-GT	Beam Power Amplifier	C3	G-7AC‡	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 50L6-GT.										**25L6-GT**
25N6-G	Direct-Coupled Power Amplifier	D9	G-7W	H	25.0	0.3	Class A Amplifier	Output Triode: Plate Volts, 180; Plate Ma., 46; Load, 4000 ohms. Input 3.8 Triode: Plate Volts, 100; Grid Volts, 0; A-F Signal Volts (Peak), 29.7; Plate Ma., 5.8.										25N6-G
25Y5	Rectifier-Doubler	D5	5E	H	25.0	0.3	Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output Ma. per Plate, 75				Min. Total Effective Plate-Supply Impedance per Plate, 0 ohms.						25Y5

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Dimens.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
25Z5	Rectifier-Doubler	D5	6E	H	25.0	0.3	Rectifier-Doubler	For other ratings, refer to Type 25Z6.										25Z5
25Z6	Vacuum Rectifier-Doublers	C2	7Q	H	25.0	0.3	Voltage Doubler	Max. A-C Volts per Plate (RMS), 117 Max. D-C Output Ma., 75				Min. Total Effective Plate-Supply Impedance: Half-Wave, 30 ohms; Full-Wave, 15 ohms.						25Z6
25Z6-GT		C3	G-7Q1				Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output Ma. per Plate, 75				Min. Total Effect. Supply Imped. per Plate: Up to 117 volts, 15 ohms; at 150 volts, 40 ohms; at 235 volts, 100 ohms.						25Z6-GT
26	Amplifier Triode	D12	4D	F	1.5	1.05	Class A Amplifier	90	−7.0	—	—	2.9	8900	935	8.3	—	—	26
								180	−14.5	—	—	6.2	7300	1150	8.3			
27	Detector★ Amplifier Triode	D6	6A1	H	2.5	1.75	Class A Amplifier	135	−9.0	—	—	4.5	9000	1000	9.0	—	—	27
								250	−21.0			5.2	9250	975	9.0			
							Bias Detector	250	(−30.0 approx.)	—	—	Plate current to be adjusted to 0.2 milliampere with no signal.						
30	Detector★ Amplifier Triode	D6	4D	D.C. F	2.0	0.06	Amplifier	For other characteristics, refer to Type 1H4-G.										30
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	0.185	31
								180	−30.0			12.3	3600	1050	3.8	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	—	—	—	32
								180	−3.0	67.5	0.4	1.7	1.0+§	650	—			
							Bias Detector	180	(−6.0 approx.)	67.5	—	Plate current to be adjusted to 0.2 milliampere with no signal.						
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	32L7-GT
								90	−7.0	90	2.0	27.0	17000	4800	—	2600	1.0	
							Half-Wave Rectifier	∴ Maximum A-C Plate Voltage..... 125 Volts, RMS Maximum D-C Output Current..... 60 Milliamperes.										
33	Power Amplifier Pentode	D12	5K	D.C. F	2.0	0.26	Class A Amplifier	180	−18.0	180	5.0	22.0	55000	1700	—	6000	1.5	33
34	Supercontrol RF Amplifier Pentode	E1	4M	D.C. F	2.0	0.06	Screen-Grid RF Amplifier	135	(−3.0 min.	67.5	1.0	2.8	600000	600	—	—	—	34
								180		67.5	1.0	2.8	1.0§	620	—			

35	Supercontrol RF Amplifier Tetrode	E1	8E	H	2.5	1.75	Screen-Grid RF Amplifier	180 250	(− 3.0 min.)		90 90	2.5* 2.5*	6.3 6.5	300000 400000	1020 1050	——	——	——	**35**
35A5	Beam Power Amplifier	C8	8AA	H	35.0	0.15	Single-Tube Class A Amplifier	For other characteristics, refer to Type 35L6-GT.											**35A5**
35B5	Beam Power Amplifier	B1a	7BZ	H	35.0	0.15	Class A Amplifier	For other characteristics, refer to Type 35C5.											**35B5**
35C5	Beam Power Amplifier	B1a	7CV	H	35.0	0.15	Class A Amplifier	110	− 7.5		110	3.0	40.0	13000	5800	——	2500	1.5	**35C5**
35L6-GT	Beam Power Amplifier	C3	G-7AC‡	H	35.0	0.15	Single-Tube Class A Amplifier	110 200	− 7.5 − 8.0		110 110	3.0 2.0	40.0 41.0	14000 40000	5800 5900	—— ——	2500 4500	1.5 3.3	**35L6-GT**
35W4	Half-Wave Rectifier Heater Tap for Pilot	B1a	8BQ‡	H	35.0	0.15	With Capacitive-Input Filter	Max A-C Plate Volts (RMS), 117 Min. Total Effect. Plate-Supply Impedance, 15 ohms Max. D-C Output Ma.: With Pilot and No Shunt Res., 60; With Pilot and Shunt Res., 90; Without Pilot, 100											**35W4**
35Y4	Half-Wave Rectifier	C6	5AL	H	35.0	0.15	With Capacitive-Input Filter	For other characteristics, refer to Type 35W4.											**35Y4**
35Z3	Half-Wave Rectifier	C8	4Z	H	35.0	0.15	With Capacitive-Input Filter	For other ratings, refer to Type 35Z4-GT.											**35Z3**
35Z4-GT	Half-Wave Rectifier	C3	G-5AA	H	35.0	0.15	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 235 Min. Total Effective Plate-Supply Impedance: Up to 117 volts, 15 ohms; at 235 volts, 100 ohms. Max. D-C Output Ma., 100											**35Z4-GT**
35Z5-GT	Half-Wave Rectifier Heater Tap for Pilot	C3	G-8AD‡	H	35.0	0.15	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 235 Min. Total Effect. Plate-Supply Imped.: Up to 117 volts, 15 ohms; at 235 volts, 100 ohms. Max. D-C Output Ma.: With Pilot and No Shunt Res., 60; With Pilot and Shunt Res., 90; Without Pilot, 100.											**35Z5-GT**
36	RF Amplifier Tetrode	D9	6E	H	6.3	0.3	Screen-Grid RF Amplifier	100 250	− 1.5 − 3.0		55 90	— 1.7*	1.8 3.2	550000 550000	850 1080	—— ——	——	——	**36**
							Bias Detector	100● 250●	− 5.0 − 8.0		55 90	——	Grid-bias values are approximate. Plate current to be adjusted to 0.1 milliampere with no signal.						
37	Detector-Amplifier Triode	D5	6A‡	H	6.3	0.3	Class A Amplifier	90 250	− 6.0 −18.0		——	——	2.5 7.5	11500 8400	800 1100	9.2 9.2	——	——	**37**
							Bias Detector	90 250	−10.0 −28.0		——	——	Grid-bias values are approximate. Plate current to be adjusted to 0.2 milliampere with no signal.						
38	Power Amplifier Pentode	D8	9F	H	6.3	0.3	Class A Amplifier	100 250	− 9.0 −25.0		100 250	1.2 3.8	7.0 22.0	140000 100000	875 1200	——	15000 10000	0.27 2.50	**38**
39/44	Supercontrol RF Amplifier Pentode	D8	9F	H	6.3	0.3	Class A Amplifier	90 250	(− 3.0 min.)		90 90	1.6 1.4	5.6 5.8	400000 1.0‡	1000 1050	——	——	——	**39/44**
40	Voltage Amplifier Triode	D12	4D	D.C. F	5.0	0.25	Class A Amplifier	135× 180×	− 1.5 − 3.0		——	——	0.2 0.2	150000 150000	200 200	30 30	——	——	**40**

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	Type
41	Power Amplifier Pentode	D5	6B	H	6.3	0.4	Amplifier	For other characteristics, refer to Type 6K6-GT.										41
42	Power Amplifier Pentode	D12	8B	H	6.3	0.7	Amplifier	For other characteristics, refer to Type 6F6-G.										42
43	Power Amplifier Pentode	D12	6B	H	25.0	0.3	Amplifier	For other characteristics, refer to Type 25A6-GT.										43
45	Power Amplifier Triode	D12	4D	F	2.5	1.5	Class A Amplifier	180	−31.5	—	—	31.0	1650	2125	3.5	2700	0.82	45
								275	−56.0			36.0	1700	2050	3.5	4600	2.00	
							Push-Pull Class AB1 Amplifier	275	Cath. Bias, 775 ohms◆			36.0◆	—	—	—	5060	12.0†	
								275	−68.0 volts, fixed bias			28.0◆	—	—	—	3200	18.0†	
45Z3	Half-Wave Rectifier	B0	5AM	H	45.0	0.075	Half-Wave Rectifier	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350				Max. D-C Output Ma., 65 Max. Peak Plate Ma., 390				Min. Total Effect. Plate-Supply Imped., 15 ohms.		45Z3
45Z5-GT	Half-Wave Rectifier Heater Tap for Pilot	C3	G-6AD§	H	45.0	0.15	With Capacitive-Input Filter	For other ratings, refer to Type 35Z5-GT.										45Z5-GT
46	Dual-Grid Power Amplifier	E3	5C	F	2.5	1.75	Class A Amplifier □	250	−33.0	—	—	22.0	2380	2350	5.6	6400	1.25	46
							Class B Amplifier◆	300	0	—	—	8.0◆	—	—	—	5200	16.0†	
								400	0			12.0◆	—	—	—	5800	20.0†	
47	Power Amplifier Pentode	E3	5B	F	2.5	1.75	Class A Amplifier	250	−16.5	250	6.0	31.0	60000	2500	—	7000	2.7	47
48	Power Amplifier Tetrode	E3	6A	D.C. H	30.0	0.4	Tetrode Class A Amplifier	96	−19.0	96	9.0	52.0	—	3800	—	1500	2.0	48
								125	−20.0	100	9.5	56.0	—	3900	—	1500	2.5	
							Tetrode Push-Pull Class A Amplifier	125	−20.0	100	—	100.0◆	—	—	—	3000	5.0†	
49	Dual-Grid Power Amplifier	D12	5C	D.C. F	2.0	0.12	Class A Amplifier ▽	135	−20.0	—	—	6.0	4175	1125	4.7	11000	0.17	49
							Class B Amplifier◆	180	0	—	—	4.0◆	—	—	—	12000	3.5†	
50	Power Amplifier Triode	F1a	4D	F	7.5	1.25	Class A Amplifier	300	−54.0	—	—	35.0	2000	1900	3.8	4600	1.6	50
								400	−70.0	—	—	55.0	1800	2100	3.8	3670	3.4	
								450	−84.0	—	—	55.0	1800	2100	3.8	4350	4.6	
50A5	Beam Power Amplifier	C6	6AA	H	50.0	0.15	Class A Amplifier	For other characteristics, refer to Type 50L6-GT.										50A5

50B5	Beam Power Amplifier	B1a	7BZ	H	50.0	0.15	Class A Amplifier	For other characteristics, refer to Type 50C5.										**50B5**
50C5	Beam Power Amplifier	B1a	7CV	H	50.0	0.15	Class A Amplifier	110	− 7.5	110	4.0	49.0	10000	7500	——	2500	1.9	**50C5**
50L6-GT	Beam Power Amplifier	C3	G-7AC‡	H	50.0	0.15	Single-Tube Class A 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	**50L6-GT**
50X6	Rectifier-Doubler	C8	7AJ	H	50.0	0.15	Rectifier-Doubler	Max. A-C Volts per Plate (RMS), 117 Max. D-C Output Ma., 75				Min. Total Effective Plate-Supply Impedance: Half-Wave, 30 ohms; Full-Wave, 15 ohms.						**50X6**
							Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output Ma. per Plate, 75				Min. Total Effect. Supply Imped. per Plate: Up to 117 volts, 15 ohms; at 150 volts, 40 ohms; at 235 volts, 100 ohms.						
50Y6-GT	Rectifier-Doubler	C3	G-7Q‡	H	50.0	0.15	Rectifier-Doubler	For other ratings, refer to Type 25Z6.										**50Y6-GT**
50Z7-G	Rectifier-Doubler Heater Tap for Pilot	D3	G-8AN‖	H	50.0	0.15	Voltage Doubler	Max. A-C Volts per Plate (RMS), 117 Max. D-C Output Ma., 65				Min. Total Effective Plate-Supply Impedance: 15 ohms.						**50Z7-G**
							Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output Ma. per Plate, 65				Min. Total Effective Plate-Supply Impedance per Plate: Up to 117 volts, 15 ohms; at 235 volts, 100 ohms.						
53	Twin-Triode Amplifier	D12	7B	H	2.5	2.0	Amplifier	For other characteristics, refer to Type 6N7-GT.										**53**
55	Duplex-Diode Triode	D9	6Q	H	2.5	1.0	Triode Unit as Amplifier	For other characteristics, refer to Type 85.										**55**
56	Detector Amplifier Triode#	D5	5A‡	H	2.5	1.0	Amplifier Detector	For other characteristics, refer to Type 76.										**56**
57	Triple-Grid Detector Amplifier	D13	6F	H	2.5	1.0	Amplifier Detector	For other characteristics, refer to Type 6J7.										**57**
58	Triple-Grid Supercontrol Amplifier	D13	6F	H	2.5	1.0	Amplifier Mixer	For other characteristics, refer to Type 6U7-G.										**58**
59	Triple-Grid Power Amplifier	D3	7A	H	2.5	2.0	Triode¶ Class A Amplifier	250	−28.0	——	——	26.0	2300	2600	6.0	5000	1.25	**59**
							Pentode** Class A Amplifier	250	−18.0	250	9.0	35.0	55000	2500	——	6000	3.0	
							Triode Class B Amplifier	300 400	0 0	——	——	20.0†† 26.0††	——	——	——	4600 6000	15.0† 20.0†	
70L7-GT	Rectifier-Beam Power Amplifier	C8b	8AA	A	70.0	0.15	Amplifier Unit as Class A Amplifier	110	− 7.5	110	3.0	40.0	15000	7500	——	2000	1.8	**70L7-GT**
							Half-Wave Rectifier	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350				Max. D-C Output Ma., 70 Max. Peak Plate Ma., 420			Min. Total Effect. Plate-Supply Imped., 15 ohms		

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	Use (Values in right give operating conditions and characteristics for indicated typical use)	Plate Supply Volts	Grid Bias as Volts	Screen Supply Volts	Screen Current Ma.	Plate Current Ma.	AC Plate Resistance Ohms	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
71-A	Power Amplifier Triode	D12	4D	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	71-A
75	Duplex-Diode High-Mu Triode	D8	6Q	H	6.3	0.3	Amplifier	For other characteristics, refer to Type 6SQ7.										75
76	Detector Amplifier Triode★	D8	8A	H	6.3	0.3	Class A Amplifier	250	−13.5	—	—	5.0	9500	1450	13.8	—	—	76
							Bias Detector	250	(−20.0 approx.)	—	—	Plate current to be adjusted to 0.2 milliampere with no signal.						
77	Triple-Grid Detector Amplifier	D8	8F	H	6.3	0.3	Class A Amplifier	100 250	− 1.5 − 3.0	60 100	0.4 0.5	1.7 2.3	600000 1.0+§	1100 1250	—	—	—	77
							Bias Detector	250	− 1.95	50	Cathode current 0.65 ma.	—	Plate Resistor, 250000 ohms. Grid Resistor,** 250000 ohms.					
78	Triple-Grid Supercontrol Amplifier	D8	8F	H	6.3	0.3	Amplifier Mixer	For other characteristics, refer to Type 6K7.										78
79	Twin-Triode Amplifier	D8	8N	H	6.3	0.6	Class B Amplifier	180 250	0 0	—	—	Power Output is for one tube at stated plate-to-plate load.				7000 14000	5.5 8.0	79
80	Full-Wave Rectifier	D12	4C	F	5.0	2.0	For other ratings, refer to Type SY3-GT.											80
81	Half-Wave Rectifier	F1	4B	F	7.5	1.25	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 700 Max. Peak Inverse Volts, 2000				Max. D-C Output Ma., 85 Max. Peak Plate Ma., 500						81
82	Full-Wave Rectifier	D12	4C	F	2.5	3.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1550				Max. D-C Output Ma., 115 Max. Peak Plate Ma., 600				Min. Total Effect. Supply Imped. per Plate, 50 ohms.		82
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 550 Max. Peak Inverse Volts, 1550				Max. D-C Output Ma., 115 Max. Peak Plate Ma., 600				Min. Value of Input Choke, 6 henries		
83	Full-Wave Rectifier	E3	4G	F	5.0	3.0	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1550				Max. D-C Output Ma., 225 Max. Peak Plate Ma., 1000				Min. Total Effect. Supply Imped. per Plate, 50 ohms.		83
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 550 Max. Peak Inverse Volts, 1550				Max. D-C Output Ma., 225 Max. Peak Plate Ma., 1000				Min. Value of Input Choke, 3 henries		
83-v	Full-Wave Rectifier	D12	4AD	H	5.0	2.0	For other ratings, refer to Type 5V4-G.											83-v

84/6Z4	Full-Wave Rectifier	D8	8D	H	6.3	0.5	With Capacitive-Input Filter	Max. A-C Volts per Plate (RMS), 325 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 60 Max. Peak Plate Ma., 180			Min. Total Effect. Supply Imped. per Plate, 150 ohms.			**84/6Z4**
							With Inductive-Input Filter	Max. A-C Volts per Plate (RMS), 450 Max. Peak Inverse Volts, 1250				Max. D-C Output Ma., 60 Max. Peak Plate Ma., 180			Min. Value of Input Choke, 10 henries			
85	Duplex-Diode Triode	D8	8G	H	6.3	0.3	Triode Unit as Class A Amplifier	135 250	−10.5 −20.0	— —	— —	3.7 8.0	11000 7500	750 1100	8.3 8.3	25000 20000	0.075 0.350	**85**
89	Triple-Grid Power Amplifier	D8	8F	H	6.3	0.4	As Triode¶ Class A Amplifier	160 250	−20.0 −31.0	— —	— —	17.0 32.0	3300 2600	1425 1800	4.7 4.7	7000 5500	0.30 0.90	**89**
							As Pentode** Class A Amplifier	100 250	−10.0 −25.0	100 250	1.6 5.0	9.5 32.0	104000 70000	1200 1800	— —	10700 6750	0.33 3.40	
							As Triode** Class B Amplifier	180	0	—	—	6.0♠	——	——	——	13600 9400	2.50† 3.50†	
V-99 X-99	Detector★ Amplifier Triode	C4 D1	4E 4D	D.C. F	3.3	0.063	Class A Amplifier	90	− 4.5	—	—	2.5	15500	425	6.6	—	—●	V-99 X-99
112-A	Detector★ Amplifier Triode	D12	4D	D.C. F	5.0	0.25	Class A Amplifier	90 180	− 4.5 −13.5	—	—	5.0 7.7	5400 4700	1575 1800	8.5 8.5	—	—	112-A
117L7/ M7-GT	Rectifier-Beam Power Amplifier	C5b	8AO	H	117	0.09	Amplifier Unit as Class A Amplifier	105	− 5.2	105	4.0	43.0	17000	5300	——	4000	0.85	**117L7/ M7-GT**
							Half-Wave Rectifier	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350				Max. D-C Output Ma., 75 Max. Peak Plate Ma., 450			Min. Total Effect. Plate-Supply Imped., 15 ohms.		
117N7-GT	Rectifier-Beam Power Amplifier	C5b	8AV	H	117	0.09	Amplifier Unit as Class A Amplifier	100	− 6.0	100	5.0	51.0	16000	7000	——	3000	1.2	**117N7-GT**
							Half-Wave Rectifier	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350				Max. D-C Output Ma., 75 Max. Peak Plate Ma., 450			Min. Total Effect. Plate-Supply Impedance, 15 ohms.		
117P7-GT	Rectifier-Beam Power Amplifier	C5b	8AV	H	117	0.09	Amplifier Unit as Class A Amplifier	For other characteristics, refer to Type 117L7/M7-GT.										**117P7-GT**
							Half-Wave Rectifier	For other ratings, refer to Type 117L7/M7-GT.										
117Z3	Half-Wave Rectifier	B1a	4CB	H	117	0.04	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 330				Max. D-C Output Ma., 90 Max. Peak Plate Ma., 540			Min. Total Effect. Plate-Supply Imped., 15 ohms			**117Z3**
117Z6-GT	Rectifier-Doubler	C3	G-7Q1	H	117	0.075	Voltage Doubler	Max. A-C Volts per Plate (RMS), 117 Max. D-C Output Ma., 60				Min. Total Effective Plate-Supply Impedance per Plate: Half-Wave, 30 ohms; Full-Wave, 15 ohms.						**117Z6-GT**
							Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output Ma. per Plate, 60				Min. Total Effect. Supply Imped. per Plate: Up to 117 volts, 15 ohms; at 150 volts, 40 ohms; at 235 volts, 100 ohms.					

Discontinued types are shown in light face.

For types added subsequent to mid '48, see Chart II, Page 46

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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	Type
		Dimen.	S. C.	C. T.	Volts	Amp.												
183/ 483	Power Amplifier Triode	D12	4D	F	5.0	1.25	Class A Amplifier	250	−60.0	——	——	30.0	1750	1700	3.0	5000	1.8	183/ 483
485	Detector Amplifier Triode	D5	5A1	H	3.0	1.25	Class A Amplifier	180	− 9.0	——	——	5.8	8900	1400	12.5	——	——	485
876	Current Regulator	G1	——	F	——	——	Voltage Range ..... 40 to 60 Volts					Operating Current ..... 1.7 Amperes						876
886	Current Regulator	G1	——	F	——	——	Voltage Range ..... 40 to 60 Volts					Operating Current ..... 2.05 Amperes						886

KEY TO TUBE DIMENSIONS

Symbol	Maximum Overall Length	Diameter
A1	1 1/2"	3/4"
A1a	1 1/4"	1 1/16"
B0	2 1/4"	1 9/16"
B0a	2 9/16"	1"
B0b	2 3/4"	1 3/4"
B1	2 3/4"	1 11/16"
B1a	2 3/4"	1"
B2	2 5/16"	1 1/16"
B3	2 1/4"	1 1/16"
B5	2 1/16"	1 1/16"
B5a	2 1/2"	1 3/8"
C0	3 1/8"	1 1/4"
C1	3"	1 1/16"
C2	3 1/4"	1 1/16"
C3	3 1/2"	1 1/4"
C4	3 1/2"	1 1/16"
C5a	3 1/2"	1 1/8"
C5b	3 1/16"	1 1/8"
C6	3 1/8"	1 1/8"
C7	3 1/2"	1 3/8"
C7a	3 5/8"	1 1/16"
C7b	3 1/2"	1 1/16"
D1	4"	1 1/16"
D1a	4 1/16"	1 1/16"
D2	4 1/2"	1 1/16"
D3	4 1/2"	1 1/8"
D4	4 1/2"	1 1/16"
D5	4 1/2"	1 1/8"
D6	4 1/2"	1 3/8"
D7	4 1/2"	1 1/2"
D8	4 11/16"	1 9/16"
D9	4 1/2"	1 1/8"
D9a	4 1/2"	1 1/16"
D10	4 1/2"	1 1/16"
D11	4 11/16"	1 1/16"
D12	4 11/16"	1 11/16"
D12a	4 1/2"	1 1/8"
D13	4 15/16"	1 1/8"
E1	5 1/16"	1 11/16"
E2	5 1/16"	2 1/16"
E3	5 1/2"	2 1/16"
F1	5 11/16"	2 1/16"
F1a	6 1/2"	2 1/16"
G1	8"	2 1/16"
H1	12 1/2"	5 1/2"
I1	14 1/2"	5 1/2"
I1a	14 1/2"	7 1/2"
J1	18"	10 1/2"
K1	21 1/2"	9 1/2"
M1	25 1/2"	12 1/2"

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

▩ 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 ½ (approx.) of filament voltage.

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

➢ Mercury-Vapor Type.

■■ Grid #1 is control grid. Grid #2 is screen. Grid #3 tied to cathode.

¶ Grid #1 is control grid. Grids #2 and #3 tied to plate.

▽ Grids #1 and #2 connected together. Grid #3 tied to plate.

▫ Grids #3 and #5 are screen. Grid #4 is signal-input control grid.

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

** For grid of following tube.

* Both grids connected together; likewise, both plates.

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

✤ For two tubes.

‡ This diagram is like the one having the same designation without the prefix G, except that Pin No. 1 has no connection.

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

↘ This diagram is like the one having the same designation with the prefix G, except that base sleeve is connected to Pin No. 1. ▩ Panel lamp section is between pins 2 and 6.

✤ For television damper service.

‡‡ This diagram is like the one having the same designation without the prefix G, except that Pin No. 1 is connected to internal shield.

✤ Panel lamp section is between pins 2 and 3.

✢ Grids #2 and #3 tied to plate.

▲▲ Both grids connected together; likewise both cathodes.

✤ This diagram is like the one having the same designation without the prefix GT, except that the base sleeve is connected to Pin No. 1.

● Applied through plate resistor of 250000 ohms or 500-henry choke shunted by 0.25-megohm resistor.

▼ Applied through plate resistor of 100000 ohms.

✖ Applied through plate resistor of 250000 ohms.

☐ Grid #2 tied to plate.

** Applied through plate resistor of 150000 ohms.

* Maximum.

§ Megohms.

◄ 50000 ohms.

✤ Grids #1 and #2 tied together.

◖ For signal-input control-grid (#1); control-grid #3 bias, −3 volts.

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

Note 1: Types with octal bases have *Miniature Cap;* all others have *Small Cap.*

Note 2: Subscript 1 on class of amplifier service (as AB_1) indicates that grid current does not flow during any part of input cycle.
Subscript 2 on class of amplifier service (as AB_2) indicates that grid current flows during some part of the input cycle.

For types added subsequent to mid '48, see Chart II, Page 46

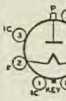
Socket Connections

Bottom Views

KEY TO TERMINAL DESIGNATIONS OF SOCKETS

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

BC = Base Sleeve
BS = Base Shell
DJ = Deflecting Electrode
ES = External Shield
F = Filament
F_M = Filament Mid-Tap
G = Grid
H = Heater
H_L = Heater Tap for Panel Lamp
H_M = Heater Mid Tap
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



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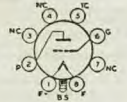


4AA

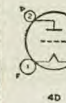
4AD

4B

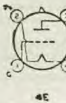
4C

4CB

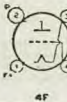
4CG



4D



4E

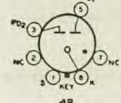


4F

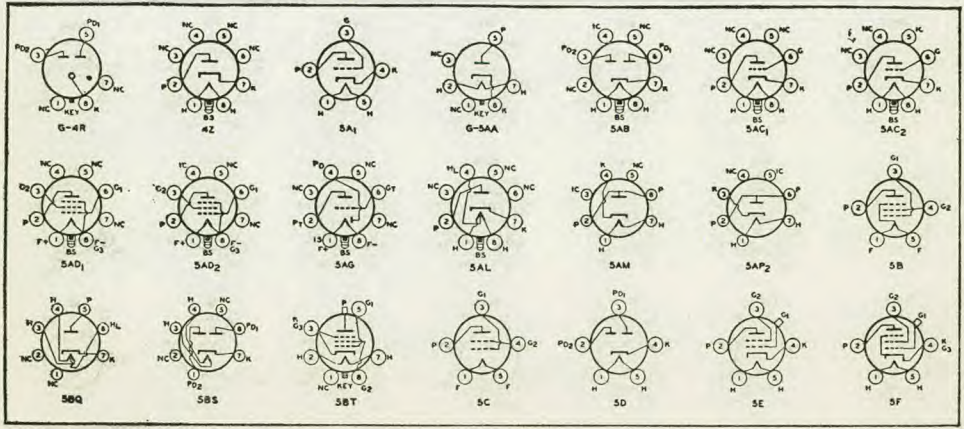
4G

4K

4M



4R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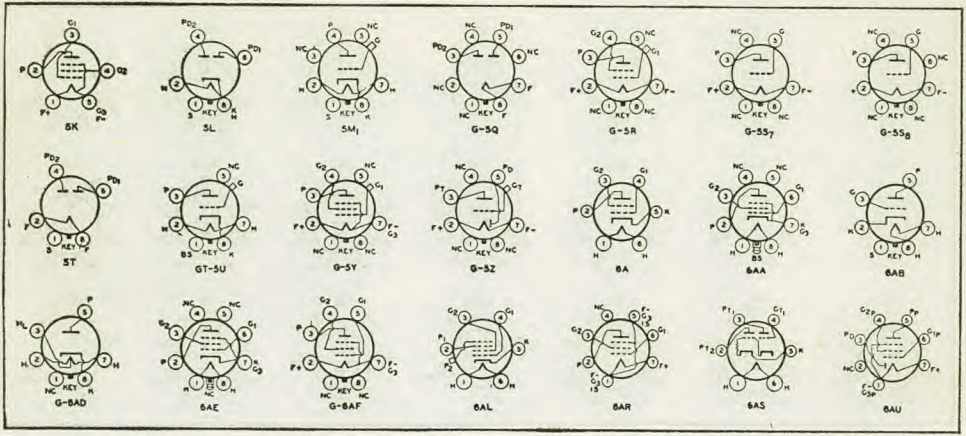
G-5AA
5AB
5AC1
5AC2
5AD1
5AD2
5AG
5AL
5AM
5AP2
5B
5BQ
5BS
5BT
5C
5D
5E
5F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5L
5M1
G-5Q
G-5R
G-557
G-558
5T
GT-5U
G-5Y
G-5Z
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6AB
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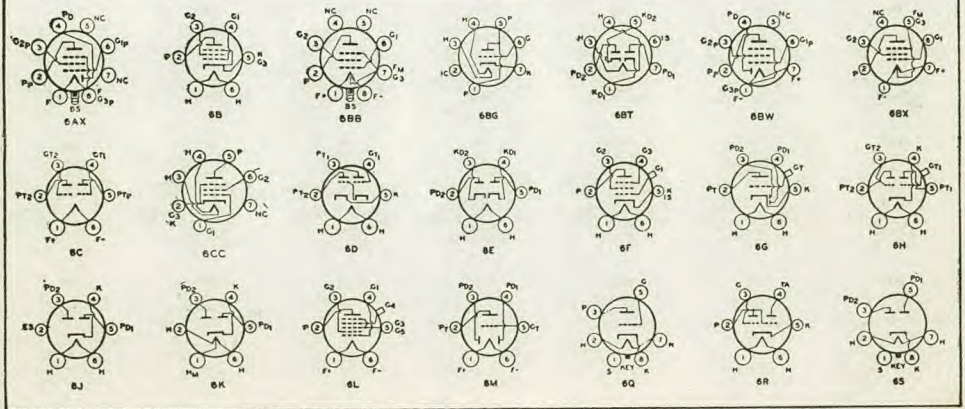
G-6AF
6AL
6AR
6AS
6AU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6BT
6BW
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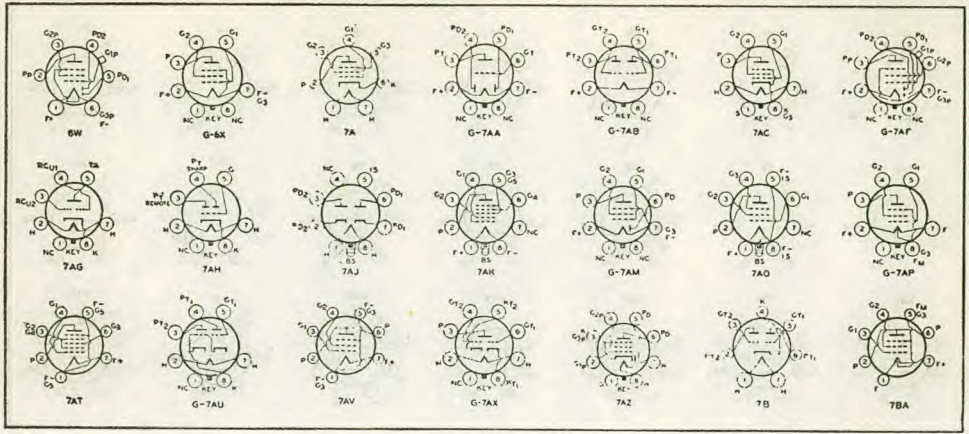
6H
6J
6K
6L
6M
6Q
6R
6S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G-7AA
G-7AB
7AC
G-7AГ
7AG
7AH
7AJ
7AK
G-7AM
7AO
G-7AP
7AT
G-7AU
7AV
G-7AX
7AZ
7B
7BA

7BD


7BF


7BK


7BK1


7BT


7BZ


7C

7CH


7CM


7CV


7D


7E


7F


7G


7H


7K

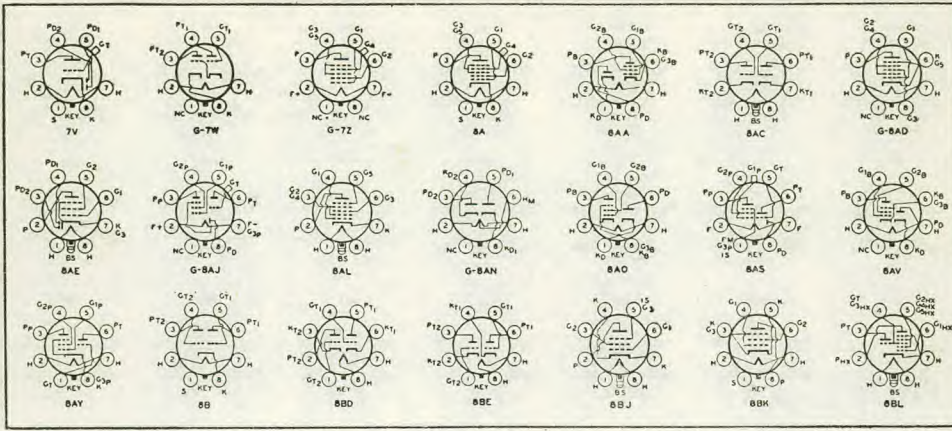

7Q


7R


7S


7T


G-7U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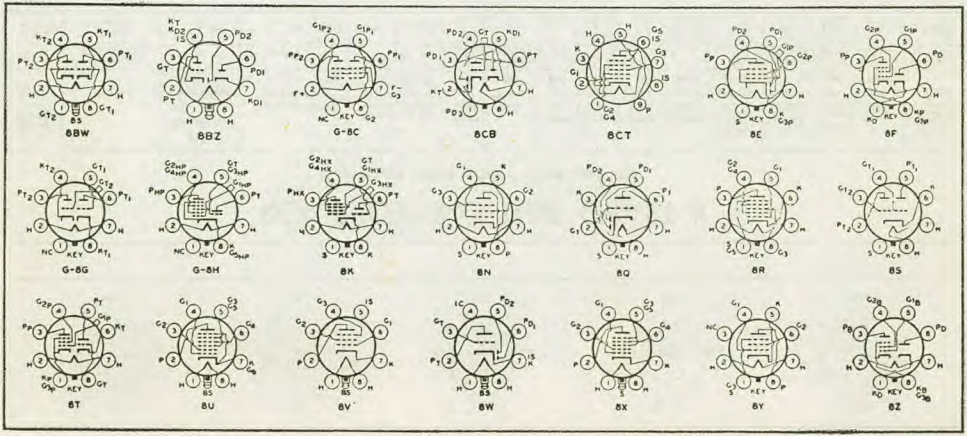
G-7Z
8A
8AA
8AC
G-8AD
8AE
G-8AJ
8AL
G-8AN
8AO
8AS
8AV
8AY
8B
8BD
8BE
8BJ
8BK
8BL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8CT
8E
8F
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8U
8V
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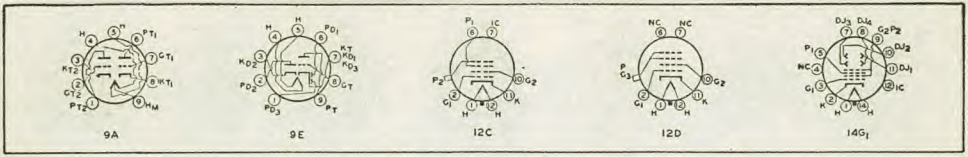
8Z



RCA RECEIVING TUBE CHART II

Covering types added since mid '48

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
0Y4	Half-Wave Gas Rectifier	B3	4BU	Cold			Rectifier	Max. Peak Inverse Plate Volts, 300 Max. D-C Starting Volts, 95								Max. Peak Plate Current, 500 ma. Max. D-C Output Current, 75 ma.		0Y4
1AC5	Power Pentode	A	8CP	F	1.25	0.04	Class A Amplifier	30 45 67.5	— 2 — 3 — 4.5	30 45 67.5	0.1 0.2 0.4	0.5 1.0 2.0	200000 170000 150000	450 600 750	—— —— ——	50000 40000 25000	5 15 30	1AC5

1AD5	Sharp-Cutoff Pentode	A	8CP$_1$	F	1.25	0.04	Class A Amplifier	30 45 67.5	0 0 0	30 45 67.5	0.16 0.35 0.75	0.45 0.9 1.85	700000 700000 700000	430 580 735	— — —	— — —	— — —	**1AD5**
1E8	Pentagrid Converter	A	8CN	F	1.25	0.04	Converter	30 45 67.5	0 0 0	30 45 67.5	0.8 1.1 1.5	0.3 0.6 1.0	300000 400000 400000	Oscillator Grid (# 1) Resistor, 0.1 meg. Conversion Transcond., 150 micromhos				**1E8**
1T6	Diode Pentode	A	8DA	F	1.25	0.04	Pentode Unit as Class A Amplifier	30 45 67.5	0 0 0	30 45 67.5	0.10 0.21 0.4	0.33 0.75 1.6	500000 500000 400000	330 475 600	— — —	— — —	— — —	**1T6**
3KP4	Directly Viewed Kinescope	G1a	11M	H	6.3	0.6	Picture Reproduction	Focus: Electrostatic Deflection: Electrostatic Phosphor: No. 4 Picture Size: 1¾" x 2⅓" Deflection Factors: DJ$_1$ and DJ$_2$ (nearer screen), 100 to 136 vdc/in./kv; DJ$_3$ and DJ$_4$ (nearer base), 76 to 104 vdc/in./kv.				Anode No. 2 and Grid No. 2 Volts, 2500 max. Anode No. 1 Volts for Focus, 320 to 600 (1000 max.) Anode No. 1 Current Range, −15 to +10 microamperes Grid No. 1 Volts for Visual Cutoff, −38 to −90				**3KP4**
5AZ4	Full-Wave Rectifier	C3	5T	F	5.0	2.0		For ratings and characteristics, refer to Type 5Y3-GT.										**5AZ4**
6AB4	High-Mu Triode	B0	6CE	H	6.3	0.15	Class A Amplifier	100 250	— 1 — 2	— —	— —	3.7 10.0	— —	4000 5500	54 55	— —	— —	**6AB4**
6AK5	Sharp-Cutoff Pentode	A1	7BD	H	6.3	0.175	Class A Amplifier	120 180	Cath. Bias	120 120	2.5 2.4	7.5 7.7	340000 690000	5000 5100	Cath. Res., 200 ohms			**6AK5**
6AH6	Sharp-Cutoff Pentode	B0	7BK	H	6.3	0.45	Class A Amplifier	300	Cath. Bias	150	2.5	10.0	500000	9000	Cath. Res., 160 ohms			**6AH6**
6AL7-GT	Electron-Ray Tube Indicator Type	C6a	8CH	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 *						**6AL7-GT**
6AN5	Power Pentode	B0	7BD	H	6.3	0.45	Class A Amplifier	120	Cath. Bias	120	12	35.0	12500	8000	Cath. Res., 120 ohms Load Res., 2500 ohms Power Output, 1.3 watts			**6AN5**
6AQ7-GT	Twin-Diode High-Mu Triode	C4	8CK	H	6.3	0.3	Triode Unit as Class A Amplifier	250	— 2	——	——	2.3	44000	1600	70	——	——	**6AQ7-GT**
6AR5	Power Pentode	B1a	6CC	H	6.3	0.4	Class A Amplifier	250 250	−16.5 −18	250 250	10 10	34.0 32.0	65000 68000	2400 2300	— —	7000 7600	3.2 3.4	**6AR5**
6AS5	Beam Power Amplifier	B1a	7CV	H	6.3	0.8	Class A Amplifier	150	— 8.5	110	6.5	35.0	28000	5600	——	4500	2.2	**6AS5**

For types added prior to mid '48, see Chart I, Page 6

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	Tube Dimensions and Socket Connections: S. C.	Cathode Type and Rating: C. T.	Cathode Type and Rating: Volts	Cathode Type and Rating: Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
6AS7-G	Low-Mu Twin Power Triode	E2	8SD	H	6.3	2.5	DC Amplifier	135	Cath. Res., 250 ohms			125	280	7000	2.0	——	——	6AS7-G
							Booster Tube for Television Scanning	Max. Peak Inverse Plate Volts, 1700 Max. Heater—Cathode Volts, ±300					Max. Peak Plate Current (Per Plate), 125 ma Max. Plate Dissipation (Per Plate), 13 watts				
6T8	Triple-Diode High-Mu Triode	B0a	9E	H	6.3	0.45	Triode Unit as Class A Amplifier	100 250	— 1 — 3	——	——	0.8 1.0	54000 58000	1300 1200	70 70	——	——	6T8
6W4-GT	Half-Wave Rectifier	C4	4CG	H	6.3	1.2	Damper Tube	Peak Inverse Plate Volts, 2000△; Peak Plate ma., 600; D-C Plate ma., 125										6W4-GT
							With Capacitive-Input Filter	Max. A-C Volts Per Plate (RMS), 350 Max. Peak Inverse Volts, 1250				Max. D-C Output ma., 125 Max. Peak Plate ma., 600			Min. Total Effect. Supply Imped. Per Plate, 145 ohms			
6BA7	Pentagrid Converter	B1b	8CT	H	6.3	0.3	Converter	100 250	— 1 — 1	100 100	10.2 10.0	3.6 3.8	500000 1 meg.	Grid-No. 1 (Osc. Grid) Res., 20000 ohms Conversion Transcond., 950 micromhos				6BA7
7AD7	Power Pentode	C8	8V	H	6.3	0.6	Class A Amplifier	300	Cath. Bias	150	7.0	28.0	30000	9500	Cath. Res., 68 ohms			7AD7
7AF7	Medium-Mu Twin Triode	B5	8AC	H	6.3	0.3	Each Unit as Class A Amplifier	100	0	——	——	10.8	6500	2600	17	——	——	7AF7
								250	Cath. Bias	——	——	9.0	7600	2100	16	Cath. Res., 1100 ohms		
7AG7	Sharp-Cutoff Pentode	B5	8V	H	6.3	0.15	Class A Amplifier	250	Cath. Bias	250	2.0	6.0	750000	4200	Cath. Res., 250 ohms			7AG7
7AH7	Sharp-Cutoff Pentode	B5	8V	H	6.3	0.15	Class A Amplifier	250	Cath. Bias	250	1.9	6.8	1 meg.	3300	Cath. Res., 250 ohms			7AH7
7K7	Twin-Diode High-Mu Triode	55	8BF	H	6.3	0.3	Triode Unit as Class A Amplifier	250	— 2	——	——	2.3	44000	1600	70	——	——	7K7
7X7	Twin-Diode High-Mu Triode	C3	8BZ	H	6.3	0.3	Triode Unit as Class A Amplifier	100 250	0 — 1	——	——	1.2 1.9	85000 67000	1000 1500	85 100	——	——	7X7
12AT7	High-Mu Twin Triode	B0a	9A	H	6.3 12.6	0.3 0.15	Each Unit as Class A Amplifier	100 250	— 1 — 2	——	——	3.7 10.0	13500 10000	4000 5500	54 55	——	——	12AT7
12BA7	Pentagrid Converter	B1b	8CT	H	12.6	0.15	Class A Amplifier	For other characteristics, refer to Type 6BA7.										12BA7

For types added prior to mid '48, see Chart I, Page 6

12LP4	**Directly Viewed Kinescope**	K1	12D	H	6.3	0.6	Picture Reproduction	Focus: Magnetic Deflection: Magnetic Deflection Angle: 54° Phosphor: No. 4 Picture Size: 7⅝″ x 10″ Uses Ion-Trap Magnet				Anode Volts, 12000 max. Grid-No. 2 Volts, 250 (410 max.) Grid-No. 1 Volts for Visual Cutoff, −27 to −63 volts Grid-No. 1 Circuit Resistance, 1.5 megohms max.						**12LP4**
12S8-GT	Triple-Diode High-Mu Triode	C8a	8CB	H	12.6	0.15	Triode Unit as Class A Amplifier	100 250	— 1 — 2	——	——	0.4 0.9	110000 91000	900 1100	100 100	——	——	**12S8-GT**
14AF7	Medium-Mu Twin Triode	B5	8AC	H	12.6	0.15	Each Unit as Class A Amplifier	For other characteristics, refer to Type 7AF7.										**14AF7**
14C5	Beam Power Amplifier	C2	6AA	H	12.6	0.225	Class A Amplifier	180 315	— 8.5 —13	180 225	3.0 7.2	29.0 34.0	58000 77000	3700 3750	——	5500 8500	2 5.5	**14C5**
14E7	Twin-Diode Remote-Cutoff Pentode	B5	8AE	H	12.6	0.15	Pentode Unit as Class A Amplifier	100 250	— 1 — 3	100 100	2.7 1.6	10.0 7.5	150000 700000	1600 1300	——	——	——	**14E7**
14F8	Medium-Mu Twin Triode	B5b	8BW	H	12.6	0.15	Each Unit as Class A Amplifier	250	Cathode-Bias Res., 500 ohms			6.0	——	3300	48	——	——	**14F8**
16AP4	Directly Viewed Kinescope	M1	12D	H	6.3	0.6	Picture Reproduction	Focus: Magnetic Deflection: Magnetic Deflection Angle: 57° Phosphor: No. 4 Picture Size: 10″ x 13¼″ Uses Ion-Trap Magnet				Anode Volts, 14000 max. Grid-No. 2 Volts, 300 (410 max.) Grid-No. 1 Volts for Visual Cutoff, −33 to −77 volts Grid-No. 1 Circuit Resistance, 1.5 megohms max.						**16AP4**
19J6	Medium-Mu Twin Triode	B2	7BF	H	18.9	0.15	Each Unit as Class A Amplifier	100	Cathode-Bias Res., 30Ω ohms			8.5	7100	5300	38	——	——	**19J6**
19T8	Triple-Diode High-Mu Triode	D2a	9E	H	18.9	0.15	Triode Unit as Class A Amplifier	For other characteristics, refer to Type 6T8.										**19T8**
35C5	Beam Power Amplifier	B1a	7CV	H	35.0	0.15	Class A Amplifier	110	— 7.5	110	3.0	40.0	——	5800	——	2500	1.5	**35C5**
50C5	Beam Power Amplifier	B1a	7CV	H	50.0	0.15	Class A Amplifier	110	— 7.5	110	8.5	49.0	10000	7500	——	2500	1.9	**50C5**
50X6	Rectifier-Doubler	C2	7AJ	H	50.0	0.15	Voltage Doubler	Max. A-C Volts per Plate (RMS), 117 Max. D-C Output ma., 75				Min. Total Effective Plate-Supply Impedance per Plate: Half-Wave, 30 ohms; Full-Wave, 15 ohms						**50X6**
							Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output ma. per Plate, 75				Min. Total Effec. Plate-Supply Imped. per Plate: Up to 117 volts, 15 ohms; at 150 volts, 40 ohms; at 235 volts, 100 ohms				

For types added prior to mid '48, see Chart I, Page 6

RCA Type	Name	Tube Dimensions and Socket Connections: Dimen.	S. C.	Cathode Type and Rating: C. T.	Volts	Amp.	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	Transconductance (Grid-plate) μmhos	Amplification Factor	Load for Stated Power Output Ohms	Power Output Watts	RCA Type
50Y7-GT	Rectifier-Doubler Heater Tap for Pilot ◆	C4	BAN	H	50.0	0.15	Voltage Doubler	Max. A-C Volts per Plate (RMS), 117 Max. D-C Output ma., 65					Min. Total Effective Plate-Supply Impedance per Plate, 15 ohms					50Y7-GT
							Half-Wave Rectifier	Max. A-C Volts per Plate (RMS), 235 Max. D-C Output ma. per Plate, 65					Min. Total Effec. Plate-Supply Imped. per Plate: Up to 117 volts, 15 ohms; at 150 volts, 40 ohms; at 235 volts, 100 ohms					
117Z4-GT	Half-Wave Rectifier	C0	G-5AA	H	117.0	0.04	With Capacitive-Input Filter	Max. A-C Plate Volts (RMS), 117 Max. Peak Inverse Volts, 350					Max. D-C Output ma., 90 Max. Peak Plate ma., 540			Min. Total Effect. Plate-Supply Imped., 30 ohms		117Z4-GT

■ Either A-C or D-C may be used on filament or heater except as specifically noted. For use of D-C on A-C filament types, decrease stated grid volts by ½ (approx.) of filament voltage.

◆ Panel lamp section is between pins 2 and 7. ⁵ Value is for both units operating at the specified conditions.

△ This rating is applicable when the duty cycle of the voltage pulse does not exceed 15 percent of one scanning cycle, and its duration is limited to 10 microseconds.

✱ With tube mounted horizontally and pins No. 4 and 8 in vertical plane (pin 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.

KEY TO TUBE DIMENSIONS

Symbol	Maximum Overall Length x Diameter	Symbol	Maximum Overall Length x Diameter	Symbol	Maximum Overall Length x Diameter	Symbol	Maximum Overall Length x Diameter
A	1 1/2" x 1"	B1a	2 1/2" x 1"	C0a	3 1/16" x 1 5/16"	E2	5 1/16" x 2 1/16"
A1	1 1/2" x 1"	B1b	2 1/2" x 1"	C3	3 1/2" x 1 1/16"	G1a	11 1/4" x 2 1/4"
B0	2 1/2" x 1"	B3	2 1/2" x 1 1/16"	C4	3 1/16" x 1 5/16"	K1	19 1/2" x 12 1/16"
B0a	2 1/16" x 1"	B5	2 15/16" x 1 1/16"	C4a	3 1/16" x 1 5/16"	M1	22 1/8" x 16"
B0b	2 1/2" x 1 1/16"	C0	3" x 1 5/16"	C9a	3 1/8" x 1 1/16"		

For types added prior to mid '48, see Chart I, Page 6

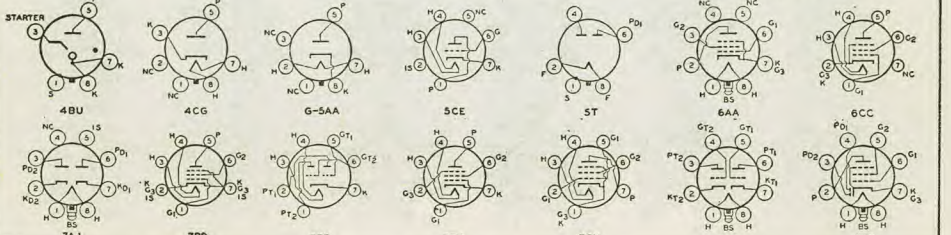
Socket Connections

Bottom Views

KEY TO TERMINAL DESIGNATIONS OF SOCKETS

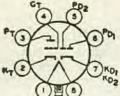
Alphabetical Subscripts B, D, HP, HX, P, and T indicate, respectively, beam unit, diode unit, heptode unit, hexode unit, pentode unit, and triode unit, in multi-unit types.

BC = Base Sleeve
BS = Base Shell
DJ = Deflecting Electrode
ES = External Shield
F = Filament
F_M = Filament Mid-Tap
G = Grid
H = Heater
H_L = Heater Tap for Panel Lamp
H_M = Heater Mid Tap
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




G-8AN


8BD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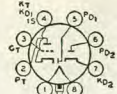
8BW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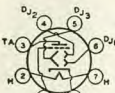
8CB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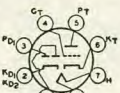
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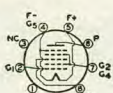
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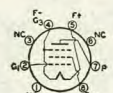
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8CP1


8CT

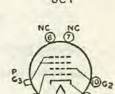

8DA


8V


9A


9E


11M


12D

RCA QUICK SELECTION GUIDE

Power, Cathode-Ray, Photo—, and Special Tubes for Radio and Industry

VACUUM POWER TUBES

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES LENGTH	DIAM.	AMPLIFICATION FACTOR	MAX. PLATE RATINGS • DC VOLTS	DISSIPATION WATTS
TRIODES (AIR-COOLED)						
3C33	12.6	$3\frac{11}{16}$	$2\frac{3}{4}$	11b	±2000	15
10-Y	7.5	$5\frac{3}{4}$	$2\frac{1}{16}$	8	450	15
203-A	10	$7\frac{7}{8}$	$2\frac{5}{16}$	25	1250	100
204-A	11	$14\frac{3}{8}$	$4\frac{1}{16}$	23	2500	250
211	10	$7\frac{7}{8}$	$2\frac{5}{16}$	12	1250	100
304TH	5/10	$7\frac{3}{4}$	$1\frac{13}{16}$*	20	3000	300
800	7.5	$6\frac{3}{8}$	$2\frac{11}{16}$	15	1250	35
801-A	7.5	$5\frac{3}{4}$	$2\frac{1}{16}$	8	600	20
805	10	$8\frac{1}{2}$	$2\frac{5}{16}$	variable	1500	125
806	5	10	$3\frac{13}{16}$	12.6	3300†	225†
808	7.5	$6\frac{1}{16}$	$2\frac{13}{16}$	47	2000†	75†
809	6.3	$6\frac{1}{16}$	$2\frac{7}{16}$	50	1000†	30†
810	10	$8\frac{3}{4}$	$2\frac{1}{4}$*	36	2500†	175†
811-A	6.3	$6\frac{21}{32}$	$2\frac{7}{16}$	160	1500†	65†
812-A	6.3	$6\frac{21}{32}$	$2\frac{7}{16}$	29	1500†	65†
826	7.5	$3\frac{11}{16}$	$2\frac{3}{4}$	31	1250†	75†
830-B	10	$6\frac{11}{16}$	$2\frac{1}{16}$	25	1000	60
833-A	10	$8\frac{13}{16}$	$4\frac{13}{32}$	35	4000†	450†
834	7.5	$6\frac{7}{8}$	$2\frac{11}{16}$	10.5	1250	50
835	10	$7\frac{7}{8}$	$2\frac{5}{16}$	12	1250	100
838	10	$7\frac{7}{8}$	$2\frac{5}{16}$	variable	1250	100
841	7.5	$5\frac{3}{4}$	$2\frac{1}{16}$	30	450	15
842	7.5	$5\frac{3}{4}$	$2\frac{1}{16}$	3	425	12
843	2.5	$5\frac{3}{4}$	$2\frac{1}{16}$	7.7	450	15
845	10	$7\frac{7}{8}$	$2\frac{5}{16}$	5.3	1250	100
849	11	$14\frac{3}{8}$	$4\frac{1}{16}$	19	2500	400
851	11	$17\frac{3}{8}$	$6\frac{1}{8}$	20.5	2500	750
1608	2.5	$5\frac{3}{4}$	$2\frac{1}{16}$	20	425	20
1623	6.3	$6\frac{5}{16}$	$2\frac{7}{16}$	20	1000†	30†
1626	12.6	$4\frac{1}{8}$	$1\frac{3}{16}$	5	250	5
5556	4.5	$5\frac{3}{4}$	$2\frac{3}{16}$	8.5	350	10
8000	10	$8\frac{3}{4}$	$2\frac{1}{4}$*	16.5	2500†	175†
8003	10	$8\frac{1}{2}$	$2\frac{5}{16}$	12	1350	100
TRIODES (AIR-COOLED)						
8005	10	$6\frac{11}{16}$	$2\frac{7}{16}$	20	1500†	85†
8012-A	6.3	$3\frac{15}{16}$	$1\frac{3}{16}$*	18	1000	40
8025-A	6.3	$4\frac{15}{16}$	$1\frac{5}{64}$*	18	1000†	30†
TRIODES (WATER-COOLED)						
9C21	19.5	$24\frac{1}{2}$	$9\frac{1}{2}$	36	17000	40000
207	22	$20\frac{1}{4}$	$6\frac{1}{2}$*	20	15000	10000
846	11	$9\frac{1}{2}$	$3\frac{3}{8}$*	40	7500	2500
858	22	$24\frac{1}{2}$	$7\frac{1}{2}$*	42	20000	20000
862-A	33	$60\frac{3}{8}$	10*	45	20000	100000
880	12.6	$11\frac{3}{8}$	7	20	10500	20000
889-A	11	$10\frac{11}{16}$	$3\frac{3}{8}$	21	8500	5000
891	11#	$20\frac{7}{8}$	$6\frac{1}{2}$*	8	12000	6000
892	11#	$20\frac{7}{8}$	$6\frac{1}{2}$*	50	15000	10000
893-A	10✣	$26\frac{3}{4}$	$6\frac{3}{8}$*	36	20000	20000
898-A	33#	$60\frac{3}{8}$	10*	45	20000	100000

†For Intermittent Commercial and Amateur Service. *Maximum Radius. ✣ Per Strand.
• Absolute values for Continuous Commercial Service, unless otherwise specified.
#Per Section. b Per Unit.

RCA QUICK SELECTION GUIDE
VACUUM POWER TUBES

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES LENGTH	DIAM.	AMPLIFICATION FACTOR	MAX. PLATE RATINGS• DC VOLTS	DISSIPATION WATTS
TRIODES (AIR-COOLED) cont'd						
5770	11	24½	9½	39	17000	50000
5771	7.5	11 5/16	7	20	15000	22500
TRIODES (FORCED-AIR-COOLED)						
4C33	5	4⅞	2 1/16	25	13000‡	250‡
6C24	11	6½	1 29/32	30	3000	600
7C24	12.6	7½	4 11/16	25	5000	2000
9C22	19.5	25	8 15/32*	36	17000	20000
9C25	6	17⅜	14¼	32	11500	17500
889R-A	11	11⅞	5 7/16*	21	8500	5000
891-R	11#	22	6½*	8	10000	4000
892-R	11#	22	6½*	50	12500	4000
893A-R	10✣	28	8 13/16*	36	20000	20000
5588	6.3	3 13/64	1¾◆	23	1000	200
5592	11	17⅜	14¼	32	11500	17500
5671	11	25	16 15/16	39	15000	25000
5713	3.3	4⅞	2 1/16	30	1500	250
5762	12.6	7⅛	4 11/16	29	5250	2500
5786	11	10	2 29/32	30	3000	600
8014-A	15	8 23/32	1 29/32	30	13500	400
TETRODES (WATER-COOLED)						
8D21	3.2	12 9/32	5¾	5§[b]	6000	6000
TETRODES (FORCED-AIR-COOLED)						
4X150A	6	2 15/32	1⅜	5§	1250	150
4X500A	5	4⅜	2 3/16	6.2§	4000	500
827-R	7.5	6 3/16	4 21/32	16§	3500	800

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES LENGTH	DIAM.	TRANSCONDUCTANCE MICROMHOS	MAX. PLATE RATINGS• DC VOLTS	DISSIPATION WATTS
BEAM POWER TUBES AND PENTODES (AIR-COOLED)						
2E24	6.3	3 21/32	1 5/16	3200	600†	13.5†
2E26	6.3	3 21/32	1 5/16	3500	600†	13.5†
3E22	6.3 /12.6	4 5/16	2⅜	4000	600□	35□
3E29 ⊛	6.3 /12.6	4 5/16	2⅜	—	5000	15
4E27 /8001	5	6 5/16	2 11/16	2800	4000	75
802	6.3	5¾	2 1/16	2250	600†	13†
803	10	9¼	2 3/16	4000	2000	125
804	7.5	7 11/16	2 1/16	3250	1500†	50†
807	6.3	5¾	2 1/16	6000	750†	30†
813	10	7½	2 3/16	3750	2250†	125†
814	10	7 11/16	2 1/16	3300	1500†	65†
815	6.3 /12.6	4 5/16	2⅜	4000	500†	25†
828	10	7 11/16	2 1/16	2700	1500†	80†
829-B	6.3 /12.6	4 5/16	2⅜	8500	750†	45†
832-A	6.3 /12.6	3 5/16	2⅜	3500	750	15

†For Intermittent Commercial and Amateur Service. *Maximum Radius. #Per Section.
• Absolute values for Continuous Commercial Service, unless otherwise specified.
§Grid-Screen Mu-Factor. b Per Unit. ✣ Per Strand. □ For Intermittent Mobile Service.
‡Pulsed Oscillator Operation—Class C Plate Modulated. ◆ Approx.
⊛ Similar to Type 829-B but for pulsed operation.

RCA QUICK SELECTION GUIDE

VACUUM POWER TUBES

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES		TRANSCONDUCTANCE MICROMHOS	MAX. PLATE RATINGS*	
		LENGTH	DIAM.		DC VOLTS	DISSIPATION WATTS
BEAM POWER TUBES AND PENTODES (AIR-COOLED)						
837	12.6	5¾	2 1/16	3400	500	12
1610	2.5	5¾	2 1/16	2500	400	6
1613	6.3	3¼	1 3/16	2500	350	10
1614	6.3	4 5/16	1¾	6050	450†	25†
1619	2.5	4 5/16	1¾	4500	400	15
1624	2.5	5¾	2 1/16	4000	600	25
1625	12.6	5¾	2 1/16	6000	750†	30†
5618	3.0/6.0	2¾	¾	3600	300†	5†
5763	6	2¾	⅞	7000	300	12
TETRODES (AIR-COOLED)						
4-65A	6	4⅜	2⅜	5§	3000	65
4-125A/4D21	5	5 11/16	2⅞	6.2§	3000	125
4-250A/5D22	5	6⅜	3½	5.15	4000	250
715-C	26	5⅞	2 9/16	—	15000♦	60♦
850	10	8½	2 5/16	2750	1250	100
860	10	8¾	4¼*	1100	3000	100
861	11	17 17/32	6¾*	2400	3500	400
865	7.5	5¾	2 1/16	750	750	15

THYRATRONS

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES		MAX. ANODE RATINGS:	
		LENGTH	DIAM.	PEAK INV. VOLTS	AV. AMP.
TRIODES					
2A4-G	2.5	4⅛	1 3/16	200	0.1
3C23	2.5	6⅛	2 1/16	1250	1.5
627	2.5	7	2 1/16	2500	0.64
629	2.5	4¼	1 3/16	350	0.04
676	5	11¾	3 13/16	2500	6.4
677	5	11¾	3 13/16	10000	4.0
884	6.3	4⅛	1 3/16	350	0.075
885	2.5	4 3/16	1 3/16	350	0.075
1904	5	7	3	1000	2.5
5557	2.5	6⅛	2 7/16	5000	0.5
5559	5	7¼	3	1000	2.5
5563	5	11 13/16	3 7/8	15000	1.6
TETRODES					
2D21	6.3	2⅛	¾	1300	0.1
3D22	6.3	4⅛	2¾	1300	0.75
105	5	11¼	2 13/16*	2500	6.4
172	5	10¾	2⅝*	2000	6.4
502-A	6.3	2 13/32	1 5/16	1300	0.1
672-A	5	8⅜	2 5/16	2500	3.2
2050	6.3	4¼	1 3/16	1300	0.1
5560	5	7 15/16	2¼*	1000	2.5
5696	6.3	1¾	¾	500	0.025

* Absolute values for Continuous Commercial Service, unless otherwise specified.
†For Intermittent Commercial and Amateur Service.
♦Pulsed Rectangular-Wave Modulator Service (with Inductive Load).
§Grid-Screen Mu-Factor. *Maximum Radius.

RCA QUICK SELECTION GUIDE

GLOW-DISCHARGE (COLD-CATHODE) TUBES

VOLTAGE-REGULATOR TYPES

TYPE	MAX. DIMENSIONS INCHES		OPERATING VOLTS	OPERATING CURRENT DC MA.	
	LENGTH	DIAM.		MIN.	MAX.
OA2	2⅝	¾	150	5	30
OA3/VR75	4⅛	1 7/16	75	5	40
OB2	2⅝	¾	108	5	30
OC3/VR105	4⅛	1 5/16	105	5	40
OD3/VR150	4⅛	1 5/16	150	5	40
874	5⅜	2 1/16	90	10	50
991	1 3/16	⅜	59	0.4	2
5651★	2⅛	¾	82 to 92	1.5	3.5

RELAY TYPES

TYPE	MAX. DIMENSIONS INCHES		MAX. RATINGS PEAK ANODE VOLTS	PEAK CATHODE MA.	AV. CATHODE MA.
	LENGTH	DIAM.			
OA4-G	4⅛	1 9/16	225	100	25
1C21	2⅝	1 5/16	180	100	25
5823	2⅛	¾	200	100	25

RECTIFIERS

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES		MAX. PLATE OR ANODE RATINGS PEAK INV. VOLTS	AV. AMP.
		LENGTH	DIAM.		
VACUUM TYPES					
2X2-A	2.5	4 17/32	1 5/16	12500	0.0075
2V3-G	2.5	4 15/32	1 5/16	16500	0.002
5R4-GY	5	5 5/16	2 1/16	2800	0.175
217-C	10	8 5/16	2 1/16	7500	0.150
579-B	2.5	7 7/16	2 1/16	20000	0.025
836	2.5	6 3/16	2 1/16	5000	0.25
878	2.5	7 5/16	1 13/16	20000	0.005
1616	2.5	6 13/16	2 1/16	6000	0.13
8013-A	2.5	6 1/16	2 1/16	40000	0.020
8020	5	8	2 5/16	40000	0.100
MERCURY-VAPOR TYPES					
575-A	5	11 1/16	3 13/16	15000	1.5
673	5	11 3/8	3 13/16	15000	1.5
816	2.5	4 11/16	1 5/16	7500	0.125
857-B	5	19 7/8	7 1/4	22000	10
866-A	2.5	6 9/16	2 5/16	10000	0.25
869-B	5	14 7/16	5 1/16	20000	2.5
872-A	5	8½	2 5/16	10000	1.25
5558	5	7	3	5000	2.5
5561	5	11¼	3 13/16	3000	6.4
8008	5	8¾	2 5/16	10000	1.25
GAS TYPES					
3B25	2.5	6 5/16	2 1/16	4500	0.5
4B26/2000	2.2	7	3¼	375	6

★Voltage-reference type.

RCA QUICK SELECTION GUIDE

IGNITRONS

TYPE	SIZE	MAX. DIMENSIONS INCHES		MAX. ANODE RATINGS*		MAX. ANODE RATINGS‡	
		APPROX. LENGTH	RADIUS	KVA DEMAND	Corresponding Av. Anode Amp.	PEAK INV. VOLTS	AV. AMP
5550	(A)	10	1¾	300	12.1	...	...
5551	(B)	13½	2⅞	600	30.2	...	...
5552	(C)	14½	3⅝	1200	75.6	...	...
5553	(D)	20	4 11/16	2400	192.	...	...
5554		17½	3 13/16	....	.....	2100	75
5555		18½	4 5/16	....	.....	2100	150

PHOTOTUBES

TYPE	MAX. DIMENSIONS INCHES		MAX. ANODE-SUPPLY VOLTS	LUMINOUS SENSITIVITY MICROAMP. PER LUMEN	SPECTRAL RESPONSE
	LENGTH	DIAM.			
GAS TYPES					
1P29	4⅛	1 1/16	100	40	S-3
1P37	4¼	1⅛	100	135	S-4
1P40	Same as type 930 except for non-hygroscopic base.				
1P41	2 5/16	13/16	90	90	S-1
868	4¼	1⅛	100	90	S-1
918	4⅛	1⅛	90	150	S-1
920¶	4	1 3/16	90	100	S-1
921	1 23/32	15/16	90	135	S-1
923	3 5/16	1 3/16	90	135	S-1
924	2 5/16	1 1/16	90	90	S-1
927	2 15/32	23/32	90	125	S-1
928	3 5/16	1 3/16	90	65	S-1
930	3 1/16	1 5/16	90	135	S-1
5581	3 1/16	1 5/16	100	135	S-4
5582	1 23/32	29/32	100	120	S-4
5583	2 15/32	23/32	100	135	S-4
5584	4	1 3/16	100	120	S-4
VACUUM TYPES					
1P39	Same as type 929 except for non-hygroscopic base.				
1P42	1 13/32	¼	180	25	S-4
917	4 5/16	1⅛	500	20	S-1
919	4 5/16	1¼	500	20	S-1
922	1 23/32	13/16	500	20	S-1
925	2⅛	1 5/16	250	20	S-1
926	1 23/32	13/16	500	6.5	S-3
929	3 1/16	1 5/16	250	45	S-4
934	2 15/32	23/32	250	30	S-4
935	4¼	1 5/16	250	30	S-5
5652☆	2⅛	1 9/32	250	45	S-4

*For welding-control. ‡For power rectification. ¶ Twin Type.
☆Composite anode—cathode type.

RCA QUICK SELECTION GUIDE

MULTIPLIER PHOTOTUBES

TYPE	MAX. DIMENSIONS INCHES LENGTH	DIAM.	MAX. ANODE-SUPPLY VOLTS	LUMINOUS SENSITIVITY MICROAMP. PER LUMEN	SPECTRAL RESPONSE
1P21	3 11/16	1 5/16	1250	40.0×10^6	S-4
1P22	3 11/16	1 5/16	1250	0.6×10^6	S-8
1P28	3 11/16	1 5/16	1250	5.0×10^6	S-5
931-A	3 11/16	1 5/16	1250	10×10^6	S-4
5819	6 1/8	2 1/4	1250	5.0×10^6	S-9

CATHODE-RAY TUBES

TYPE	CATHODE VOLTS	MAX. DIMENSIONS INCHES LENGTH	APPROX. SCREEN DIAM.	MAX. ANODE-No. 2 VOLTS	DEFLECTION FACTOR‡‡ VOLTS DC/IN./KV.
OSCILLOGRAPH TYPES, MEDIUM-PERSISTENCE GREEN FLUORESCENCE					
2AP1-A	6.3	7 5/8	2	1000	250
2BP1	6.3	7 13/16	2	2500	135
3AP1-A	2.5	11 7/8	3	1500	76
3BP1-A	6.3	10 1/4	3	2000	100
3JP7	6.3	10 1/4	3	2000	100
3KP1	6.3	11 3/4	3	2500	59
3RP1	6.3	9 3/8	3	2500	86
5BP1-A	6.3	17 1/8	5	2000	42
5CP1-A	6.3	17 1/8	5	2000	46
5UP1	6.3	15 1/8	5	2500	33
7CP1	6.3	13 13/16	7	8000	**
902-A	6.3	7 5/8	2	600	232.5
905-A	2.5	16 7/8	5	2000	57.5
912	2.5	16 7/8	5	15000	62
913	6.3	4 3/4	1	500	600
914-A	2.5	20 7/16	9	7000	46
OSCILLOGRAPH TYPES, SHORT-PERSISTENCE BLUISH FLUORESCENCE					
2BP11	Same as type 2BP1 except for phosphor.				
3KP11	Same as type 3KP1 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.				
OSCILLOGRAPH TYPES, LONG-PERSISTENCE BLUISH FLUORESCENCE					
3FP7-A	6.3	10 1/4	3	4000++	250
5CP7-A	Same as type 5CP1-A except for phosphor.				
5UP7	Same as type 5UP1 except for phosphor.				
5FP7-A	6.3	11 1/2	5	8000	**
7BP7-A	6.3	13 5/8	7	8000	**
10KP7	6.3	18	10	10000 ■	**
12DP7-A	6.3	20 1/2	12	10000	**
FLYING-SPOT TYPE, SHORT-PERSISTENCE BLUISH-GREEN FLUORESCENCE					
5WP15	6.3	11 13/16	5	27000	**
TRANSCRIBER KINESCOPE, SHORT-PERSISTENCE BLUISH FLUORESCENCE					
5WP11	6.3	11 11 13/16	5	27000	**
VIEW-FINDER KINESCOPE, MEDIUM-PERSISTENCE WHITE FLUORESCENCE					
5FP4-A	6.3	11 1/2	5	8000 ■	**

ICONOSCOPES

1848 For portable television cameras. Image Size, 2 3/16" x 2 7/8". Heater volts, 6.3. Max. anode-No. 2 volts, 1200.

1850-A For film and studio pick-up. Image Size, 3 9/16" x 4 3/4". Heater volts, 6.3. Max. anode-No. 2 volts, 1200.

5527 For industrial and experimental applications. Image Size, 1.4" (diagonal). Max. anode-No. 2 volts, 900.

**Magnetic deflection. ■Anode and grid-No. 3 volts. ++Anode-No. 3 volts. ‡‡For deflecting electrodes DJ_1 and DJ_2 (nearer screen).

RCA QUICK SELECTION GUIDE

IMAGE ORTHICONS

2P23 For outdoor pickup use. Original image orthicon having appreciable infrared response.

5655 For studio pickup use. Has negligible infrared response.

5769 Companion tube to 5655. For outdoor pickup use but also suitable for studio use.

5820 For outdoor pickup use and also suitable for studio use. Has exceptional sensitivity and response approaching that of the eye.

MONOSCOPE

2F21 A 5" magnetic-deflection type for supplying signal to test video performance of television transmitters and receivers.

VACUUM-GAUGE TUBES

1945 Hydrogen-Sensitive, Ionization Type. For locating minute leaks in vacuum enclosures.

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 0.0001 mm of mercury (0.1 micron).

1950 Ionization Type. Similar to type 1949, but soft-glass construction.

SPECIAL RED TUBES

5691 High-Mu Twin Triode similar to type 6SL7-GT but designed and manufactured for critical industrial applications where 10000-hour life, rigid construction, uniformity, and stability are paramount.

5692 Medium-Mu Twin Triode similar to type 6SN7-GT but designed and manufactured for critical industrial applications where 10000-hour life, rigid construction, uniformity, and stability are paramount.

5693 Sharp-Cut off Pentode similar to 6SJ7 but designed and manufactured for critical industrial applications where 10000-hour life, rigid construction, uniformity, and stability are paramount.

KLYSTRONS

2K26 Single-resonator, reflex type oscillator for operation in the frequency range from 6250 to 7060 megacycles. It has a useful power output in the order of 100 milliwatts.

2K56 Same as 2K26 but for operation in the frequency range from 3840 to 4460 megacycles.

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 12000 cycles per second.

TYPES FOR SPECIAL APPLICATIONS

ACORNS

6F4 Oscillator Triode. Heater-cathode type. For frequencies up to 1200 Mc.

6L4 U-H-F Oscillator Triode. Heater-cathode type. For frequencies up to 1200 Mc.

954 Detector Amplifier Pentode. Heater-cathode type. For frequencies up to 430 Mc.

955 Detector Amplifier Oscillator Triode. Heater-cathode type. For frequencies up to 600 Mc.

956 Super-Control R-F Amplifier Pentode. Remote cut-off, heater-cathode type. For frequencies up to 430 Mc.

957 Detector Amplifier Oscillator Triode. Filament volts, 1.25. Amplification factor, 13.5.

958-A Amplifier Triode. Filament volts, 1.25. For oscillator and r-f amplifier service.

959 Detector Amplifier Pentode. Filament volts, 1.25 For r-f amplifier and detector service.

9004 U-H-F Diode. Heater-cathode type. For u-h-f service as a rectifier, detector or measuring device. Resonant frequency, about 850 Mc.

9005 U-H-F Diode. Heater-cathode type. For u-h-f service as a rectifier, detector or measuring device. Resonant frequency, about 1500 Mc.

RCA QUICK SELECTION GUIDE

TYPES FOR SPECIAL APPLICATION (cont'd)

MINIATURES

3A4 Power Amplifier Pentode. Filament volts, 1.4/2.8. A-F power output of 700 milliwatts.

3A5 H-F Twin Triode. Class C power output of 2 watts at 40 Mc.

6J4 U-H-F Amplifier Triode. Grounded-grid amplifier. For frequencies up to 500 Mc.

26A6 RF Amplifier Pentode. Remote-cutoff, heater-cathode type. Useful in aircraft receivers operating directly from 12-cell storage batteries.

26C6 Duplex-Diode 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.

1654 Half-Wave High-Vacuum Rectifier. Max. peak inverse plate volts, 4300. Max. average plate current, 1 ma.

9001 Detector Amplifier Pentode. A sharp cut-off pentode for use as an r-f amplifier or detector in u-h-f service.

9002 U-H-F Triode. Useful as a u-h-f detector, amplifier and oscillator.

9003 Super-Control R-F Amplifier Pentode. Remote cut-off type useful as a mixer or as an r-f or i-f amplifier in u-h-f services.

9006 U-H-F Diode. Heater-cathode type. Resonant frequency, about 700 Mc. For u-h-f service as a rectifier, detector, or measuring device.

METAL, GT, AND OTHER GLASS TYPES

2C21/1642 Twin-Triode Amplifier. Medium Mu. Plate dissipation per plate, 2.1 watts. Heater volts, 6.3; current, 0.6 ampere.

2C22 High-Frequency Triode. Max. plate dissipation, 3.3 watts. Max. plate volts, 300.

2C40 Lighthouse Triode. A high frequency amplifier and oscillator for use up to 3000 Mc. Plate dissipation, 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 10 watts max., mu = 48, and gm = 8000 micromhos.

6AG7-Y Power Amplifier Pentode. Similar to type 6AG7 except for micanol base.

6SJ7-Y Triple-Grid Detector Amplifier. Same as type 6SJ7 except for micanol base.

6SN7-GTY Twin-Triode Amplifier. Same as type 6SN7-GT except for micanol base.

12A6 Beam Power Amplifier. Metal type. Designed particularly for aircraft applications. Heater volts, 12.6. Max. plate volts, 250.

12K8-Y Triode-Hexode Converter. Same as type 12K8 except for micanol base.

12L8-GT Twin-Pentode Power Amplifier. Heater volts, 12.6. Max. plate volts, 180. Plate dissipation per plate, 2.5 watts. Similar to type 1644.

12SW7 Duplex-Diode Triode. Heater-cathode type. Useful in aircraft receivers.

12SX7-GT Twin-Triode Amplifier. Heater-cathode type. Useful in aircraft receivers.

12SY7 Pentagrid Converter. Single-ended metal type. Useful in aircraft receivers.

26A7-GT Twin A-F Beam Power Amplifier. Heater volts, 26.5. Max. plate volts, 50. For 12-cell battery service.

89-Y Triple-Grid Power Amplifier. Same as type 89 except for micanol base.

559 Lighthouse Diode. For use as a detector and in r-f switching.

864 Amplifier Triode. For low-microphonic applications. Filament volts, 1.1. Max. plate volts, 135.

1603 Triple-Grid Detector Amplifier. For low-microphonic applications. Heater volts, 6.3. Max. plate volts, 250. Similar to type 6C6. For new equipment 1620 is recommended.

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.

RCA QUICK SELECTION GUIDE

TYPES FOR SPECIAL APPLICATION (cont'd)

1621 Power Amplifier Pentode. Metal type. For applications requiring continuity of service. Heater volts, 6.3. In push-pull service: Max. plate volts, 300; a-f power output, 5 watts.

1622 Beam Power Amplifier. 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 Amplifier. Metal type. Similar to type 25L6 except for 12.6-volt heater, and plate voltage and dissipation ratings.

1633 Twin-Triode Amplifier. Similar to type 6SN7-GT except for 25-volt heater.

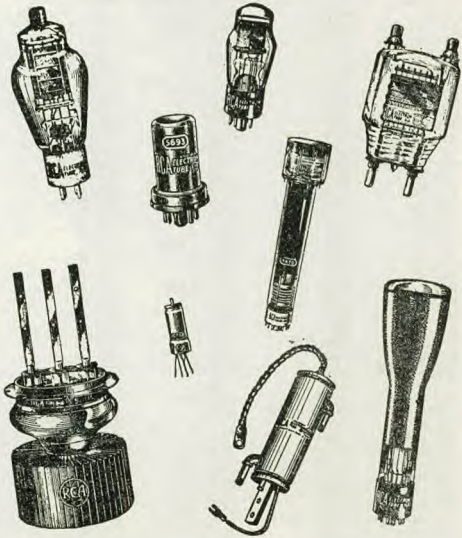
1634 Twin-Triode Amplifier. Single-ended metal type. Same as 12SC7 but especially suited for applications requiring matched triode units.

1635 Class B Twin Amplifier. Heater-cathode type. For audio amplifier applications.

1644 Twin-Pentode Power Amplifier. Same as type 12L8-GT, but is especially suited for applications requiring matched pentode units.

1851 Television Amplifier Pentode. Metal, heater-cathode type. For new equipment, type 6AC7/1852 is recommended.

5794 Fixed-Tuned Oscillator Triode. Intended for transmitting service in radiosonde applications at 1680 Mc.



RCA REPLACEMENT DIRECTORY OF TUBES FOR COMMUNICATIONS & INDUSTRY

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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*
CE-1(A-D)	868, 918	FG-271	5551
1P32	927	WT-272	5557
2AP1	2AP1-A	WE-274B	5R4-GY
2B4	885	WE-289A	4B26/2000
2X2/879	2X2-A	WT-294	OD3/VR150
3AP1	3AP1-A	WE-295A	203-A
3BP1	3BP1-A	UE-303A	203-A
4D21	4-125A/4D21	WE-304B	834
5BP1	5BP1-A	F-307A	207
5CP1	5CP1-A	CE-309	5557
5CP7	5CP7-A	CE-311	3C23
5FP7	5FP7-A	UE-311	211
5HP1	5HP1-A	UE-311C	835
6Q5-G	84	UE-317C	217-C
7BP7	7BP7-A	WE-322A	803
7GP4	7JP4	UE-342B	211
PJ-8	5556	375-A	575-A
G-9	868	FJ-401	1P29
CE-11V (A-D)	917	GL-415	5550
RK-11	1623	GL-451	8020
12DP7	12DP7-A	WL-630	2050
FG-17	5557	WL-631	5559
RK-20A	804	KU-634	677
CE-20	927	WL-651/656	5552
CE-21(AD)	920	WL-652/657	5551
CE-23(AD)	923	WL-653B	5555
PJ-23	868	WL-655/658	5553
CE-25(AD)	927	672	672-A
RK-25	802	WL-679	5554
RK-25B	802	WL-681/686	5550
CE-28(AD)	928	NL-715	5557
RK-28	803	WL-735	868
RK-28A	803	801	801-A
CE-29(AD)	929, 1P39	829	829-B
CE-30(AD)	930, 1P40	829-A	829-B
RK-30	800	832	832-A
FG-32	5558	833	833-A
RK-33	2C21/1642	C-833	833-A
RK-39	807	857	857-B
CE-41	921	862	862-A
CE-42	922	866	866-A
RK-44	857	866-A/866	866-A
RK-47	814	869-A	869-B
R51A	927	872	872-A
FG-57	5559	872-A/872	872-A
RK-57	805	F-872B	872-A
RK-58	838	879	2X2-A
R59A	868, 918	889	889-A
R60A	920	893	893-A
HY-61/807	807	902	902-A
R61A	930	UE-905	805
FG-67	1904	905	905-A
VR75-30	OA3/VR75	906-P1	3AP1-A
FG-95	5560	908	908-A
FG-104	5561	914	914-A
VR105-30	OC3/VR105	931	931-A
VR150-30	OD3/VR150	UE-938	838
CE-226	4B26/2000	UE-949	849
FG-235A	5552	UE-952	852
FG-238B	5555	UE-966-A	866-A
HK-257(B)	4E27/8001	UE-967	5557
FG-258A	5553	UE-972A	872-A
FG-259B	5554	UE-975A	575-A
		1642	2C21/1642

RCA REPLACEMENT DIRECTORY OF TUBES FOR COMMUNICATIONS & INDUSTRY

CONSULT THIS CHART FIRST

Direct Replacement Types—Continued

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*
1802-P1	5BP1-A	2000	4B26/2000
1803-P4	12AP4	2525A5	5BP1-A
1804/P4	9AP4	5728	1904
1811-P1	7CP1	8001	4E27/8001
1849	1850-A	8016	1B3-GT/8016
1850	1850-A	189049	4B26/2000
		289416D	4B26/2000

*Where a "type to be replaced" carries a multiple designation incorporating a 5500-series number, that type can be directly replaced by the RCA type having the same 5500-series number. For example: the 5557/FG-17, as well as the FG-17, is directly replaceable by the RCA-5557. Likewise, the 5552/651/656, as well as the WL-651/656, is directly replaceable by the RCA-5552.

RCA REPLACEMENT DIRECTORY OF TUBES FOR COMMUNICATIONS & INDUSTRY

CONSULT THIS CHART SECOND

Similar Types

RCA types shown below are similar to the corresponding types to be replaced. For more information as to degree of interchangeability, compare published data.

CE-1V(A-D)	917, 919	TZ-40	811
CE-2(A-D)	930, 1P40	RK-41	807
2E25	2E24	RK-45	837
3B27	836	RK-46	804
3C21	838	RK-48A	813
4C21	211	SR-50	917
4C22	8005	HY-51B	830-B
CE-5(A-D)	927	HY-51Z	838
HV-12	806	RK-51	830-B
RK-12	809	SR-51	926
G15F	927	RK-52	811
FV-20	8000	53AWB	927
T-20	1623	SR-53	917
TV-20	810	HK-54	808
TZ-20	809	T-55	8005
CE-22(A-D)	924	HY-57	812-A
PJ-22	917	R58A	927
RK-23	802	58AWB	927
RK-23A	802	59D	929
HY-25	809	CE-60	917
RK-27	806	HY-60	807
FG-27A	5559	SK-60	868
HY-30Z	809	R61BV	929
CE-31	919	RK-63	806
CE-34	934	SK-63	918
35(G, T)	808	R64AV	925
CE-36(A-D)	927	RK-64	807
RK-36	806	HY-69	1624
RK-37	808	V-70D	8005
RK-38	806	R71A	930, 1P40
HY-40	812-A	R71AV	925
HY-40Z	811	71D	929
T-40	812-A	FP-85	8020
		R85A	928

Similar Types—Continued

RCA types shown below are similar to the corresponding types to be replaced. For more information as to degree of interchangeability, compare published data.

Type to be Replaced	*Replace by RCA Type*
HF-100	810
100TH	810
100TL	8000
ZB-120	838
T-125	810
HF-130	211
143D	2X2-A
GL-146	805
150P	803
150T	805
TW-150	810
152TH	806
152TL	806
GL-152	805
HK-154	808
T-155	806
C-200	810
HF-200	8000
T-200	806
C-201	805
C-202	805
HD-203 (A, C)	805
HF-203H	8003
T-203Z	838
211B	211
211C	835
HD-211C	805
211D	211
211E	835
HF-211H	8003
212E	849
WE-214E	217-A
WE-220C	892
Z-225	866-A
CE-225	4B26/2000
WE-231D	864
241B	833-A
242C	211
WE-249A	866-A
T-249B	866-A
250TH	806
250TL	806
HF-250	806
WE-252A	842
HK-254	810
WE-254B	865
WE-255B	869-B
HF-258B	866-A
260A	860
HF-261A	835
264(A, B)	864
266B	857-B
WE-266C	857-B
267-B	872-A
WE-268A	801-A
WE-271A	843
WE-274A	5R4-GY
276A	835
282A	850
WE-284 (A, D)	845
WE-287-A	5557
WE-298A	862-A
HF-300	806
T-303C	8000
UE-303U	8000
UE-304A	204-A
WE-304B	834
WE-307A	837
UE-310	801-A
UE-311CH	8000
UE-311 (T, CT)	8003
UE-312E	849
315A	673
WE-319A	872-A
WE-321A	673
WE-331	805
WE-341AA	891-R
C-350	807
353A	872-A
HK-354 (C,D,E,F)	806
WE-356A	808
WE-357A	833-A
F-357A	857-B
F-363A	892
F-367A	673
F-376A	835
393A	3C23
UE-468	800¢
WL-463	806
WL-471	8003
WL-734	917
WL-741	923
T-756	809
UE-812H	8005
T-814	806
T-822	806
825	1623
848	891
C-849A	833-A
C-849H	833-A
F-857A	857-B
861-A	861
863	892
866-B	866-A
C-872	872-A
UE-911CH	835
UE-942	842
1847	5527
1899	2F21
2501-A3	3AP1-A
2501-C3	908-A
5514	811
5516	2E24
7193	2C22
8014-A	6C24†

†When operated under 8014-A conditions, can replace 8014-A.

TELEVISION SERVICE DATA

TV CHANNELS AND CARRIER FREQUENCIES

Television Channel Number	Channel Freq. Mc	Picture Carrier Freq. M	Sound Carrier Freq. Mc
2	54- 60	55.25	59.75
3	60- 66	61.25	65.75
4	66- 72	67.25	71.75
5	76- 82	77.25	81.75
6	82- 88	83.25	87.75
7	174-180	175.25	179.75
8	180-186	181.25	185.75
9	186-192	187.25	191.75
10	192-198	193.25	197.75
11	198-204	199.25	203.75
12	204-210	205.25	209.75
13	210-216	211.25	215.75

TV SIGNAL DATA:

Number of lines = 525, interlaced.

Frame frequency (number of complete pictures) = 30/sec.

Field frequency (number of alternate-line pictures) = 60/sec.

Horizontal frequency = 525 x 30 = 15,750 cps.

Time for one complete line (including retrace time) = 1/15,750 = 63.5 microseconds.

Horizontal blanking time = 16% of 63.5 = 10.2 microseconds.

Active time for one horizontal line = 63.5—10.2 = 53.3 microseconds.

Vertical blanking duration = 6.5% of vertical scanning time.

Number of usable horizontal lines = 525—(525 × 0.065) = 490 lines.

Limiting horizontal resolution = 340 lines, approx.

Black level = 75% of maximum carrier voltage.

White level = 0-15% of maximum carrier voltage.

Aspect ratio (ratio of width to height) = 4 to 3.

Sound FM, 100% modulation = ±25 kc deviation.

FIGURE A

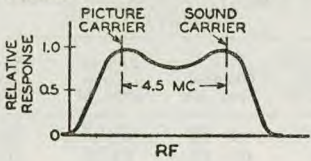


FIGURE B

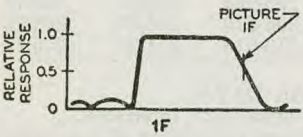


Figure (A) shows typical frequency response of rf and mixer circuits. Figure (B) shows typical frequency response of picture if amplifier. The position of the picture if carrier is important and is approximately 50% up the slope as shown.

The over-all rf and picture if response is similar to that shown in (B), providing the rf response is sufficiently wide and flat, as shown in (A).

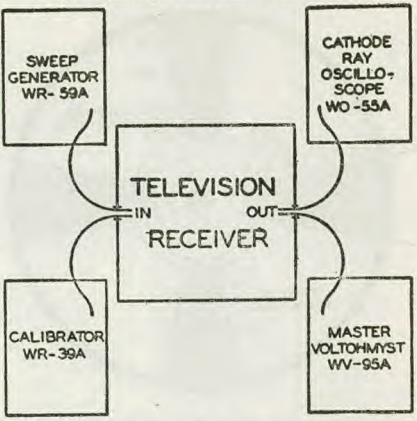
Traps are provided in the picture if amplifier to keep the sound if from getting through the picture if amplifier, and to attenuate the adjacent-channel sound and picture signals.

In RCA Victor television receivers, the picture if is 25.75 Mc, the sound if is 21.25 Mc, and the adjacent channel traps are 27.25 and 19.75 Mc.

In some television receivers there is a sound trap in the video amplifier, tuned to 4.5 Mc, to suppress the difference-frequency beat between the picture and sound carriers.

In one type of television receiver, the sound and picture if signals are passed through a common if amplifier and the 4.5-Mc beat between the two carriers is trapped out in the video amplifier and passed through an FM discriminator and audio amplifier.

TEST EQUIPMENT
For Aligning Television Receivers



Sweep Generator: RCA WR-59A covers all broadcast television channels, TV and FM-if bands. Features pre-set sweeps for each TV channel; has 5 if sweeps, and a video sweep. Balanced or single-ended outputs are provided with a piston attenuator having a 20,000 to 1 maximum ratio. This generator provides rf and if signals of *fundamental* (not beat) frequency, which are free from spurious and unwanted signals.

Television Calibrator: RCA WR-39A comprises a precision signal generator covering the if and rf ranges from 19 to 110 Mc and from 170 to 240 Mc with a built-in dual crystal calibrator providing accurate check points every ¼ Mc up to 240 Mc, and a built-in audio channel and speaker facilitating zero-beat determinations. The calibrator furnishes an accurate marker for sweep alignment. Traps can be peaked precisely, and oscillator frequencies set to an accuracy of $\pm 0.01\%$.

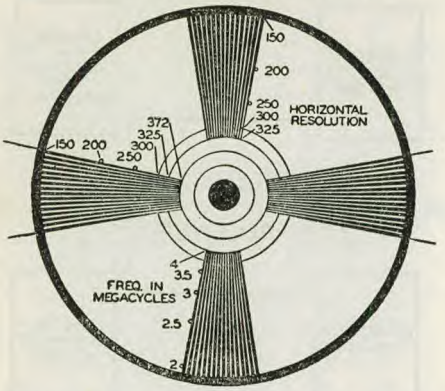
Cathode-ray Oscilloscope: RCA WO-55A is used for visual alignment. Can be calibrated as a peak-to-peak voltmeter and has a useful range up to 200 kc.

Electronic Meter: RCA WV-95A Master Volt-Ohmyst* (VTVM), includes new scales for direct-reading of capacitance and ac voltage, in addition to the regular vacuum-tube voltmeter features.

These instruments which provide complete TV, FM, and AM testing and alignment facilities are matched in size and styling, and fit the RCA Laboratory Test Racks WS-16A and WS-17A.

* Reg. trade mark, U. S. Pat. Off.

USING THE TEST PATTERN



The television test pattern is used to set all of the controls and adjustments on television receivers, and to check definition in terms of "line resolution" or bandwidth. The test pattern illustrated above is the one used by WNBT.

Linearity and size (both horizontal and vertical controls) should be adjusted so that the large circles are as round as possible, and so that the test pattern is slightly larger than the cabinet opening.

Brightness and contrast controls should be adjusted so that each step (usually five) from black to white in the shading blocks is separate and distinct.

Focus control should be adjusted so that the separate lines in the vertical resolution wedge are distinct as far as possible in to the narrow end of the vertical wedge.

Centering controls should be adjusted so that the active or unblanked portion of the pattern is centered with respect to the cabinet opening.

RESOLUTION WEDGES

Horizontal wedges indicate **vertical** resolution, which is expressed in terms of lines, and not in bandwidth. Vertical wedges indicate **horizontal** resolution, which is expressed in terms of lines, or bandwidth, or both.

Using the test pattern (Con't)

In some patterns, the wedges are marked at several points by numbers to indicate the equivalent number of lines: The last zero may be omitted, (250 shown as "25."). If equivalent bandwidth is shown on the vertical wedge, it is given in megacycles, for example, 2.0 Mc is shown as "2".

In patterns where this information is not shown, it may be obtained from the TV station, or computed as follows:

The equivalent number of lines at any desired point along the horizontal or vertical wedge $= \frac{V \times L}{d}$

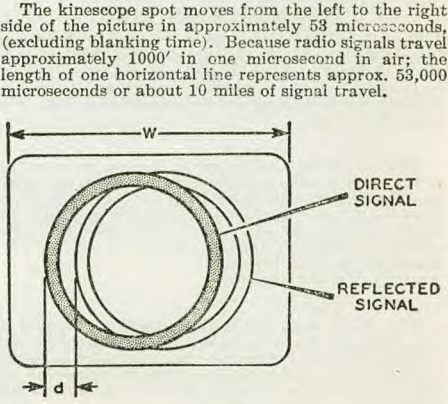
Where V = height of test pattern in inches.
d = accurately measured distance in inches across the wedge at the desired point.
L = total number of black and white lines in the wedge.

To convert horizontal resolution in lines to bandwidth in Mc, divide by 80. Conversely, multiply the bandwidth by 80 to determine the equivalent number of lines.

BANDWIDTH		EQUIVALENT HORIZONTAL RESOLUTION IN LINES
1.0 Mc	=	80 lines
2.0 Mc	=	160 lines
3.0 Mc	=	240 lines
4.0 Mc	=	320 lines

AIR PATH DISTANCE OF REFLECTED SIGNAL

The kinescope spot moves from the left to the right side of the picture in approximately 53 microseconds, (excluding blanking time). Because radio signals travel approximately 1000′ in one microsecond in air; the length of one horizontal line represents approx. 53,000 microseconds or about 10 miles of signal travel.



Since a reflected signal travels a greater distance than the direct signal, it arrives later than the direct signal and, therefore, causes a trailing echo or ghost. (See illustration—page 66). The approximate additional air-path distance traveled by the reflected signal is approximately $\frac{d \times 10}{W}$ miles.

Where W is the width of the picture in inches, excluding blanking, and d is the distance in inches measured between corresponding points on the direct and reflected signals.

Example: W = 8", d = ¾"

$\frac{0.75 \times 10}{8.00} = 0.94$ miles (approx.)

(The TV receiver should be adjusted for best horizontal linearity before measuring W and d.)

The equivalent width per mile is listed below for various picture sizes:

Picture Tube Size in Inches	Approx. Picture Width in Inches	Displacement in Inches for One Mile of Signal Travel
5, Proj.	20	2.0
16	13.3	1.4
15	12	1.2
12	9.6	1.0
10	8	0.8
7	5.6	0.6

REFLECTION ON ANTENNA TRANSMISSION LINE

To determine whether an echo may be due to an incorrectly terminated transmission line, first compute the additional air-path distance of the echo, as outlined above. Then, compute the maximum equivalent air-path reflection length of the transmission line. This value is $\frac{2L}{k}$ feet.

Where L is the total length of the transmission line in feet, and k is the velocity constant of the particular line (0.83 for RCA 300-ohm Bright-Picture Line.) The factor of 2 is required because it is assumed that the signal makes a round trip from the receiver to the antenna and back to the receiver.

Example: L = 200', k = 0.83

$\frac{2 \times 200}{0.83} = 480$ feet

If the echo were due to line reflection, it would be displaced a distance equivalent to 480 feet or less than 1/10th mile from the direct signal. Compare this value with the computed additional air-path distance of the echo to determine whether the echo is due to line reflection or to an external reflection.

RCA RADIO BATTERIES

Radio-Engineered for Extra Listening Hours

RCA Type	Voltage	Interchangeable with Eveready Burgess		Max. Dimensions L	W	H
FARM "A" BATTERIES						
VS024	1½	740	20F	7 11/16	2 13/16	7
VS025	3	X125	20F2	11 11/16	4	6
FARM "AB" BATTERIES						
VS021	1½-90	758	—	10 13/16	2 3/4	6 3/8
VS022	1½-90	748	17GD60	15 3/4	4 1/4	6 13/16
VS045	1½-90	Zenith Z28	18GD60	12 9/16	5 5/8	6 13/16
VS049	6-75	Zenith Z682	3G4D50	14 3/8	4 3/16	6 11/16
FARM "B" AND "C" BATTERIES						
VS026	45	485	2308P1	8 1/16	3 3/16	7 3/16
VS027	45	386	10308P1	8 1/16	4 5/16	7 3/16
VS028	4½	781	5360	2 3/8	13/16	2 7/8
VS029	7½	773	5540	3 15/16	7/8	2 3/4
VS030	4½	X771	2370P1	4 1/16	1 1/16	3 1/16
VS031	22½	768	5156P1	4	2 1/2	3
INDUSTRIAL AND SPECIAL APPLICATION TYPES						
VS006S	1½ (Ignition)	6 (Ign.)	—	—	2 5/8	6 3/16
VS006C	1½	6 (Ign.)	—	—	2 5/8	6 5/8
VS039	6 (Hotshot)	1461-2	—	10 3/8	2 7/8	7 3/8
VS040C	6 (Lantern)	409	F4H	2 11/16	2 11/16	4 5/16
VS040S	6 (Lantern)	—	—	2 11/16	2 11/16	4 5/16
VS042C	1½	—	—	—	2 5/8	6 5/8
VS042S	1½	—	—	—	2 5/8	6 3/16
VS100	3	—	F2BP	2 5/8	1 3/8	4 3/16
VS101	1½	—	2FBP	2 5/8	1 3/8	4 3/16
VS102	22½	763	4156	3 3/8	2 1/8	2 3/4
VS106	1½	—	4FH	2 11/16	2 11/16	4 5/16
VS112	45	672S	—	4 1/8	2 5/8	5 5/16
VS114	45	—	Z30NX	28 1/32	1 27/32	4 13/16
VS126	45	—	2308SC	8 1/8	3 1/4	7 3/16
VS127W	45 (Wax)	Marine Radio Use		8	4	6 3/4
VS130	4½	761T	2370BP	4	1 7/16	3 7/16
VS131	22½	778	5156SC	4 1/8	2 1/2	3 5/16
VS132	9	—	D6BP	4 1/16	2 13/16	2 7/8
VS133	4½	703	532	2 3/8	13/16	3 1/16
VS136	3	—	2F2H	2 11/16	2 11/16	4 5/16
VS137	22½	766T	2156	6 1/2	4	3 7/8
VS138	3	—	4F2H	3 7/8	2 15/16	5 7/8
VS139	7½	—	4F5H	7 3/16	3 21/32	6 3/16
VS140	9	1662	4F6H	8 1/16	3 15/16	6
VS157	45	—	21308SC	8 1/8	4 5/8	7 11/16
VS214	45	For Electron Microscope		3 7/16	2 1/4	4 9/16
FLASHLIGHT BATTERIES						
VS001	1½	950	2	—	1 11/32	2 13/32
VS033	1½ (Baby)	935	1	—	1 1/32	1 15/16
VS034	1½ (Penlite)	915	Z	—	37/64	2

RCA RADIO BATTERIES

Radio-Engineered for Extra Listening Hours

RCA Type	Voltage	Interchangeable with Eveready Burgess		Max. Dimensions L	W	H
PORTABLE "A" BATTERIES						
VS002	4½	746	G3	4	1⅜	4 11/16
VS003	7½	687	G5	3⅞	2⅝	4 9/16
VS004	1½	742	4F	2⅝	2⅝	4 1/16
VS005	1½	—	4FL	3 15/16	1⅜	5⅝
VS007	1½	743	6F	3 15/16	1⅜	5⅝
VS008	1½	745	8FL	3⅞	1 7/16	10 3/4
VS009	6	744	F4P1	2⅝	2⅝	4⅛
VS010	6	718	2F4	3⅞	2 13/16	5½
VS011	6	747	2F4L	3⅞	1 7/16	10 3/4
VS036	1½	"Sealed-in-Steel"		—	1 5/16	2⅜
VS065	7½	—	C5	2 5/16	2	3 1/16
VS067	4½	736	F3	4	1⅜	4⅛
VS070	1½ (HA)	Zenith Z1S	TE	—	1 5/16	4 1/16
VS129	7½	—	B5	4 1/16	1 5/16	3
PORTABLE "B" BATTERIES						
VS012	45	762	B30	4⅛	2⅝	5 5/16
VS013	45	482	M30	3 9/16	1 13/16	5½
VS014	45	—	A30	3 7/16	2¼	4 9/16
VS015	45	738	Z-30	3	2¼	4
VS016	67½	467	XX45	2⅝	1 5/16	3¾
VS055	45	455	XX30	2 23/32	31/32	3 11/16
VS090	90	490	N60	3 11/16	1⅜	3¾
PORTABLE "AB" AND "A-B-C" BATTERY PACKS						
VS018	7½-9-90	754	G6M60	10⅝	3 7/16	4⅛
VS019	7½-9-90	758	F6A60	9½	2 25/32	4⅜
VS020	6-7½-67½	—	F5M45	9 7/16	2⅝	4⅜
VS037	1½-90	—	6FA60	11⅞	1½	6 7/16
VS038	7½-63	—	G5A42	8⅝	2¾	4 1/16
VS041	1½-67½-7½	—	—	4 5/16	3¾	6⅜
VS043	1½-90	—	50A60	5½	2 11/16	7⅛
VS044	6-90	—	2F4A60	12⅛	2¾	4⅜
VS046	6-75	Zenith Z675	G4B50	12⅝	2¾	4⅛
VS047	9-90	Zenith Z985	G6B60	13⅝	2¾	4 9/16
VS048	6-90	—	F4B60	10¾	2¾	5
VS050	6-7½-75	755	T5Z50	8 9/16	2 7/16	3 11/16
VS052	1½-61½	Philco 41A4G	4GA41	9⅜	2 11/16	3 7/16
VS053	1½-63	Philco 41A4F1	4GA42	9⅛	2	4¾
VS054	1½-90	—	6TA60	10	2 3/16	4⅞
VS057	7½-9-90	Philco P-361	—	9⅜	2 3/16	3¾
VS058	9-90	Zenith Z909	F6A60P	9½	2 23/32	4⅜

Ask your Distributor for complete Battery Catalog, Form No. BAT-134, for Current Price List, and also for Battery Quick Selection Replacement Guide, Form No. 2F589

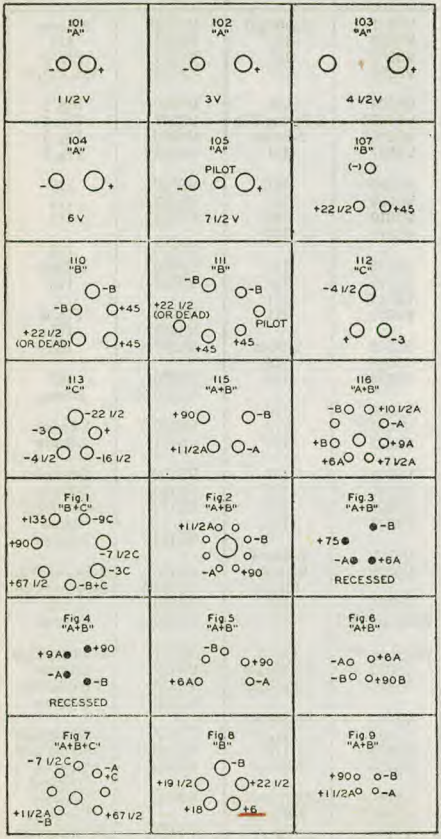
SOCKET & TERMINAL GUIDE FOR RCA BATTERIES

Battery Type	Socket Pattern or Terminals	Battery Type	Socket Pattern or Terminals
VS001	Flashlight	VS042S	2-Screw
VS002	103	VS043	115
VS003	105	VS044	Fig. 6
VS004	101	VS045	115, Fig. 2
VS005	101	VS046	Fig. 3
VS006C	2-Spring Clip	VS047	Fig. 4
VS006S	2-Screw	VS048	Fig. 5
VS007	101	VS049	Fig. 3
VS008	101	VS050	116
VS009	104	VS052	115
VS010	104	VS053	115
VS011	104	VS054	115
VS012	111	VS055	2-Snap
VS013	110	VS057	116
VS014	111		
VS015	111	VS058	Fig. 4
		VS065	105
VS016	2-Snap	VS067	103
VS018	116		
VS019	116	VS070	101
		VS090	2-Snap
VS020	116		
VS021	115	VS100	2-Screw
VS022	115	VS101	2-Screw
VS024	101	VS102	2-Screw
VS025	102	VS106	2-Screw
VS026	107	VS112	3-Insulated Screw
VS027	107	VS114	3-Screw
VS028	2-Screw		
VS029	5-Screw, Pigtail	VS126	3-Spring Clip
		VS127W	3-Spring Clip
VS030	112	VS129	105
VS031 as "C"	113	VS130	4-Screw
VS031 as "B"	Fig. 8	VS131	3-Spring Clips
VS033	Flashlight	VS132	2-Screw
VS034	Flashlight	VS133	Flat Spring
		VS136	2-Screw
VS036	Flashlight		
VS037	Fig. 9	VS137	3-Spring Clip
VS038	116	VS138	2-Spring Clip
VS039	2-Screw	VS139	2-Screw Terminal
VS040	2-Coil Spring	VS140	2-Screw
VS040S	2-Screw		Terminal
VS041	Fig. 7	VS157	3-Spring Clip
VS042C	2-Spring Clip	VS214	111

RCA BATTERY SOCKET PATTERNS

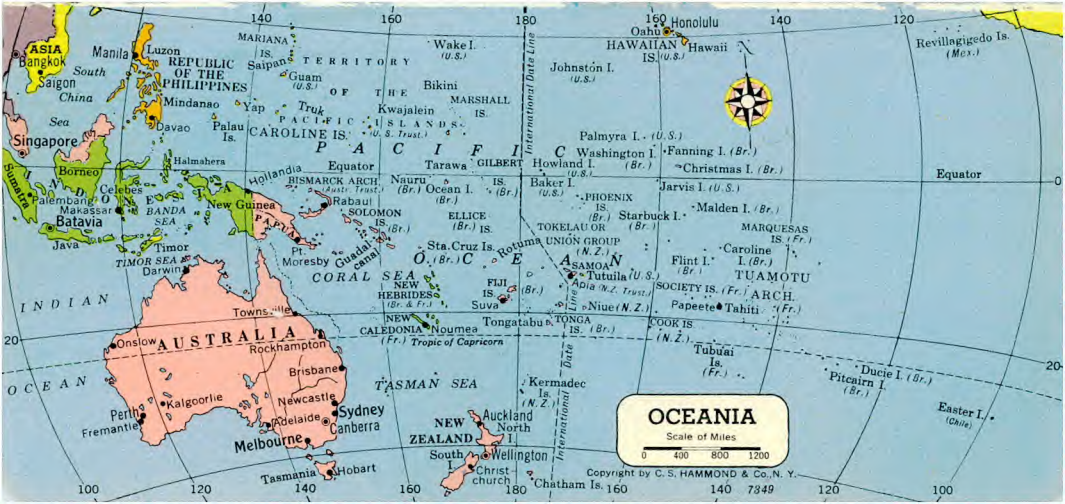
Nos. 101-116 are based on corresponding RMA Standard Battery Socket Patterns

Top Views Are Shown



Note: Any particular battery type may not provide all voltages shown on patterns applicable to the type


120
140
160
180
160
140
120
100
100
80
A R C T I C
O C E A N
Nordvik
Arctic Circle
Yakutsk
Anadyr
Fairbanks
N O R T
60
Krasnoyarsk
Juneau
A M E
Khabarovsk
Vancouver
Ulan Bator
Mukden
N O R T H
Seattle
U N I T E
Chicago
40
Peiping
INTERNATIONAL
S T A T E
San Francisco
Nanking
Tokyo
P A C I F I C
Los Angeles
Houston
Shanghai
Tropic of Cancer
HAWAIIAN IS.
20
Rangoon
Bangkok
Manila
Honolulu
Mexico
O C E A N
CEN
AMERICA
Singapore
Equator
0
DATE LINE
Batavia
S O U T H
INDIAN
Darwin
20
AUSTRALIA
Brisbane
Tropic of Capricorn
OCEAN
Perth
P A C I F I C
Sydney
40
Melbourne
NEW
ZEALAND
Tasmania
Wellington
O C E A N
60
Antarctic Circle
BELL
WILKES LAND
AMUNDSEN SEA
ROSS SEA
80
A N T A R
100
Longitude East of Greenwich
Longitude West of Greenwich


ASIA
Bangkok
Manila
Luzon
South
Saigon
China
REPUBLIC OF THE PHILIPPINES
MARIANA IS.
Saipan
TERRITORY OF THE PACIFIC ISLANDS
Guam (U.S.)
Wake I. (U.S.)
Bikini
MARSHALL IS.
Kwajalein
Yap
Truk
Mindanao
Davao
Palau Is.
CAROLINE IS. (U.S. Trust.)
Sea
Singapore
Halmahera
Borneo
Celebes
Sumatra
Palembang
Makassar
Batavia
Java
Timor
TIMOR SEA
Darwin
Hollandia
BISMARCK ARCH. (Austr. Trust.)
Rabaul
New Guinea
PAPUA
BANDA SEA
Moresby
Guadalcanal
CORAL SEA
Equator
Nauru (Br.)
Ocean I. (Br.)
GILBERT IS. (Br.)
Tarawa
Howland I. (U.S.)
Baker I. (U.S.)
Washington I. (Br.)
Palmyra I. (U.S.)
Fanning I. (Br.)
Christmas I. (Br.)
Jarvis I. (U.S.)
PHOENIX IS. (Br.)
Starbuck I.
Malden I. (Br.)
TOKELAU OR UNION GROUP (N.Z.)
Sta. Cruz Is.
Fotuna
ELLICE IS. (Br.)
SOLOMON IS. (Br.)
NEW HEBRIDES (Br. & Fr.)
Suva
FIJI IS. (Br.)
SAMOA
Tutuila (U.S.)
Apia (N.Z. Trust.)
Niue (N.Z.)
Flint I. (Br.)
Caroline I. (Br.)
MARQUESAS IS. (Fr.)
SOCIETY IS. (Fr.)
Papeete
Tahiti
TUAMOTU ARCH. (Fr.)
COOK IS. (N.Z.)
Tubuai Is. (Fr.)
Pitcairn I. (Br.)
Ducie I. (Br.)
Easter I. (Chile)
Revillagigedo Is. (Mex.)
Honolulu
Oahu
HAWAIIAN IS. (U.S.)
Hawaii
Johnston I. (U.S.)
International Date Line
Townsville
Onslow
AUSTRALIA
Rockhampton
Brisbane
Newcastle
Kalgoolie
Perth
Fremantle
Adelaide
Sydney
Canberra
Melbourne
Tasmania
Hobart
CALEDONIA (Fr.)
Noumea
Tropic of Capricorn
Tongatabu
TONGA IS. (Br.)
TASMAN SEA
Kermadec Is. (N.Z.)
NEW ZEALAND
Auckland
North I.
South I.
Wellington
Christchurch
Chatham Is.
INDIAN OCEAN
OCEANIA
Scale of Miles
0 400 800 1200
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7349
140
160
180
160
140
120
100
20
0
20


80 60 40 20 0 20 40 60
80
Ellesmere I.
GREENLAND
SVALBARD
80
BAFFIN BAY
Baffin I.
Arctic Circle
Murmansk
ICELAND
Stockholm
Sverdlovsk
Moscow
London
Berlin
Paris
Warsaw
Stalingrad
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Washington
Atlanta
Lisbon
Istanbul
Kabul
ATLANTIC
Rabat
Tehran
New Delhi
Tropic of Cancer
Cairo
Karachi
Calcutta
WEST INDIES
Mecca
Bombay
OCEAN
AFRICA
Dakar
Lagos
Addis Ababa
Panama
Bogotá
Belém
Equator
Nairobi
0
Natal
Leopoldville
Dar es Salaam
Lima
SOUTH AMERICA
La Paz
SOUTH
INDIAN
Tananarive
Rio de Janeiro
Tropic of Capricorn
Johannesburg
Lourenço Marques
20
ATLANTIC
OCEAN
Santiago
Buenos Aires
Capetown
40
OCEAN
Punta Arenas
C. Horn
60
Drake Passage
Antarctic Circle
Palmer Pen.
Alexander I
WEDDELL SEA
QUEEN MAUD LAND
80
C T I C A
THE WORLD
Equatorial Scale
Miles
0 1000 2000 3000 4000
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80 60 40 20 0 20 40 60

UNITED STATES
Western Section
Scale of Miles
0 100 200 300 400


ALASKA
Scale of Miles
0 150 300 600
ARCTIC OCEAN
BEAUFORT SEA
CANADA
Barrow
Port Hope
Wiseman
Kotzebue
Arctic Circle
Ft. Yukon
Seward Pen.
Galena
Yukon
Fairbanks
Nome
Nenana
Dawson
St. Michael
McGrath
Tanacross
Anchorage
Valdez
White Horse
Bethel
Cordova
Seward
Skagway
Naknek
Yakutat
Juneau
Alaska Pen.
Gulf of Alaska
ALEXANDER ARCH.
Kodiak I.
Sitka
Perryville
Petersburg
Ketchikan
Dutch Harbor
PACIFIC OCEAN
165
150
135
60
5439

MEXICO
Scale of Miles
0 50 100 200 300
UNITED STATES
Tijuana
Ensenada
Mexicali
S. Quintin
Nogales
Ciudad Juarez
El Paso
Rio Grande
Colorado
Dallas
Red
Mississippi
Mobile
New Orleans
Houston
Nacozari
Hermosillo
Gulf of California
Lower California
I. Cedros
Sta. Rosalia
Guaymas
Ciudad Obregon
Navojoa
Chihuahua
Camargo
Piedras Negras
San Antonio
Galveston
San Juan
Corpus Christi
Nuevo Laredo
Monclova
Laredo
Sabinas Hidalgo
Parral
Gómez Palacio
Monterrey
Brownsville
Matamoros
Torreon
Saltillo
Culiacán
Durango
Linares
La Paz
Mazatlan
Matehuala
Ciudad Victoria
Tropic of Cancer
Rosario
Fresnillo
Zacatecas
San Luis Potosi
Tampico
Tuxpan
Aguascalientes
Is. Tres Marias
Tepic
Cárdenas
León
Guadalajara
Guanajuato
Tuxpan
Irapuato
Querétaro
Autlan
Pachuca
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Mexico
Jalapa
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Toluca
Puebla
Revillagigedo Is.
Manzanillo
Colima
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Orizaba
Cordoba
Tehuacan
Coatzacoalcos
Chilpancingo
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Minatitlan
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Tuxtla
Acapulco
Tehuantepec
Juchitan
Ciudad de las Casas
Comitán
Salina Cruz
Tapachula
Guatemala
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Gulf of Campeche
Mérida
Valladolid
Tekax
Yucatan Pen.
Campeche
Carmen
Chetumal
Belize
BR. HONDURAS
I. Cozumel
CUBA
GUATEMALA
HONDURAS
Tegucigalpa
EL SALVADOR
San Salvador
PACIFIC OCEAN
114
110
106
102
98
94
90
86
30
26
22
18
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105
100
Lake of the Woods
LakeNipigon
Missouri
MONT.
Yellowstone
Miles City
Williston
Minot
Devils Lake
NORTH DAKOTA
Dickinson
Missouri
Bismarck
Jamestown
Fargo
Red
Grand Forks
Crookston
Port Arthur
Fort William
Virginia
Hibbing
Duluth
Superior
Lake Sup
MINNESOTA
Fergus Falls
Brainerd
St. Cloud
St. Paul
Minneapolis
Mankato
Winona
Rochester
45
Sheridan
SOUTH DAKOTA
Aberdeen
Watertown
Pierre
Lead
Rapid City
Hot Springs
Huron
Mitchell
Sioux Falls
Yankton
WYO.
Casper
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Cheyenne
Scottsbluff
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Hastings
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Waterloo
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Oshkosh
Milwaukee
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Rockford
Chicago
Rock Island
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Sault St.
Kalam
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Boulder
40
Denver
South Platte
COLORADO
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Topeka
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Arkansas City
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East St. Louis
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Clovis
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Enid
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Ada
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Ardmore
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Hot Springs Nat'l Park
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Tennessee
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Jackson
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Meridian
Red
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Tyler
Monroe
Shreveport
TEXAS
San Angelo
Waco
Corsicana
Temple
Alexandria
Vicksburg
Hattiesburg
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Baton Rouge
Biloxi
Mississippi
30
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Beaumont
Rio Grande
Del Rio
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San Antonio
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Piedras Negras
Corpus Christi
Nuevo Laredo
Laredo
GULF
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Brownsville
Matamoros
25
Ciudad Victoria
MEXICO
MEX.
20
Merida
México
Veracruz
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105
Regina
Lake Manitoba
95
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Lake Superior
Marquette
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Red
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Lincoln
St. Joseph
Hannibal
Springfield
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Mississippi
Denver
Topeka
Kansas City
Missouri
St. Louis
Salina
KANSAS
Sedalia
Jefferson City
MISSOURI
Colorado Springs
Arkansas
Hutchinson
Wichita
Springfield
Cape Girardeau
Cairo
Pueblo
La Junta
Dodge City
Arkansas City
Coffeyville
Joplin
Trinidad
Tulsa
Jonesboro
Jackson
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Raton
Enid
Muskogee
Fort Smith
OKLAHOMA
ARKANSAS
Memphis
Las Vegas
Tucumcari
Amarillo
Oklahoma City
Shawnee
Little Rock
Hot Springs Nat'l Park
Clarksdale
Ada
Pine Bluff
Albuquerque
Clovis
Lawton
Ardmore
Red
Texarkana
MISS.
NEW MEXICO
Wichita Falls
Denison
Sherman
Jackson
El Dorado
Lubbock
Marshall
Monroe
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Shreveport
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Alexandria
Las Cruces
Carlsbad
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Del Rio
San Antonio
Gulf of Mexico
Piedras Negras
Chihuahua
Corpus Christi
Laredo
Nuevo Laredo
Parral
Brownsville
25
Monterrey
Matamoros
MEXICO
Torreón
Ciudad Victoria
Culiacán
Durango
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20
Guadalajara
Veracruz
México
100
95


UNITED STATES
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8419
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Detroit
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Frankfort
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TENNESSEE
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Greenville
Rome
SOUTH CAROLINA
Columbia
Savannah
Charleston
Atlanta
Augusta
Macon
Columbus
GEORGIA
Savannah
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Tuscaloosa
Montgomery
Dothan
Tallahassee
Jacksonville
Pensacola
FLORIDA
St. Augustine
Daytona Beach
Orlando
St. Petersburg
Tampa
W. Palm Beach
Miami
Key West
Florida Straits
ATLANTIC OCEAN
N
BAHAMA IS.
Gt. Bahama I.
Nassau
Eleuthera I.
Cat I.
Andros I.
Tropic of Cancer
Exuma I.
Long I.
CUBA
Habana
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Arctic Circle
ICELAND
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Tromsø
Narvik
A T L A N T I C O C E A N
Faeroe Is. (Dan.)
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Bordeaux
Toulouse
Rhône
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Wrocław
Kraków
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IONIAN SEA
TYRRHENIAN SEA
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Adrar
In Salah
Hun
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Murzuch
Ft. Laperrine
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Arkhangel'sk
Syktyvkar
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L. Onega
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Kalinin
Yaroslavl'
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Molotov
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Ufa
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Vitebsk
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Krasnodar
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Derna
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Asyût
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Mecca
Aswân
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Scale of Miles
0 100 200 300 400 500 600
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Svalbard
Severnaya Zemlya
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Novaya Zemlya
KARA SEA
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G. of Bothnia
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Leningrad
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BLACK SEA
Izmir
Ankara
TURKEY
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Meshed
Herat
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Gwadar (Oman)
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Ahmedabad
Indore
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Diu (Port.)
Bombay
Damao (Port.)
Nagpur
Hyderabad
Poona
Yanaon (Fr.)
GOA (Port.)
Bangalore
Madras
Mahe (Fr.)
Karikal (Fr.)
Madura
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Colombo
Laccadive Is. (India)
Maldive Is. (Br.)
Nile
AFRICA
KUWAIT
Medina
SAUDI ARABIA
Riyadh
Mecca
Jidda
Persian Gulf
TRUCIAL OMAN
G. of Oman
Masqat
OMAN
RED SEA
Port Sudan
Massaua
YEMEN
San'a
ADEN PROT.
Aden
Djibouti
ARABIAN SEA
Socotra (Br.)
Mogadiscio
Seychelles (Br.)
Chagos Arch. (Br.)
INDIAN OCEAN
Madagascar
Tananarive
Réunion (Fr.)
Mauritius (Br.)
Tropic of Capricorn
40
80
20
0

AFRICA
Scale of Miles
0 200 400 600 800 1000 1200
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ATLANTIC OCEAN
EUROPE
ASIA
London
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BLACK SEA
CASPIAN SEA
MED. SEA
Algiers
Rabat
Casablanca
Oran
Tunis
MOROCCO
TUNISIA
IFNI
Ouargla
Bengasi
Tripoli
Alexandria
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Cairo
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SP. SAHARA
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LIBYA
Zella
Gat
EGYPT
Aswan
Tropic of Cancer
Persian G.
RED SEA
Nile
Sahara
Wadi Halfa
FRENCH WEST AFRICA
Tombouctou
Niger
Niamey
L. Tchad
Ft. Lamy
FRENCH EQUAT. AFRICA
ANGLO-EGYPTIAN SUDAN
Khartoum
Asmara
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BR. SOMALIL'D
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TOGO
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Abidjan
Accra
Fernando Poo
SP. GUINEA
CAMEROUN
Yaoundé
Bangui
Gulf of Guinea
Equator
São Tomé
Coquilhatville
BELGIAN CONGO
UGANDA
Entebbe
KENYA
IT. SOMALIL'D
Mogadiscio
Nairobi
Mombasa
Tabora
ZANZIBAR
Dar-es-Salaam
TANGANYIKA
Brazzaville
Léopoldville
Congo
Elisabethville
ATLANIC OCEAN
Ascension
Luanda
ANGOLA
Benguela
Nova Lisboa
NO. RHO.
Lusaka
Zomba
MOZAMBIQUE
Mozambique Chan.
MADAGASCAR
Tananarive
St. Helena
SO. RHO.
Salisbury
SOUTH WEST AFRICA
Windhoek
Walvis Bay
BECH. PROT.
Pretoria
Mafeking
Tropic of Capricorn
Lourenço Marques
SWAZI LD.
Johannesburg
BASUTO LD.
UNION OF SOUTH AFRICA
Capetown
Port Elizabeth
East London
INDIAN OCEAN

CANADA
Scale of Miles
0 100 200 400 600
ALASKA
Fairbanks
Anchorage
Seward
Kodiak I.
Bristol Bay
YUKON
Yukon
Dawson
White Horse
NORTHWEST TERRITORIES
Aklavik
Norman Wells
Gt. Bear L.
Port Radium
Ft. Simpson
Yellowknife
Gt. Slave L.
Ft. Smith
Victoria I.
Dease Str.
Arctic Circle
N. Magnetic Polar Area
Chesterfield
Southampton I.
Coats I.
Mansel I.
Baffin Island
Pangnirtung
Foxe Basin
Hudson Str.
Davis Strait
GREENLAND
CANADA
Juneau
ALEXANDER ARCH.
QUEEN CHARLOTTE IS.
BRITISH COLUMBIA
Fort Nelson
Prince Rupert
Prince George
Vancouver I.
Victoria
Vancouver
Seattle
Portland
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Peace River
Edmonton
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Lethbridge
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Saskatoon
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Churchill
Flin Flon
L. Winnipeg
Winnipeg
Brandon
L. of the Woods
Hudson Bay
Belcher Is.
ONTARIO
Moosonee
Ft. William
Port Arthur
Timmins
Sault Ste. Marie
Sudbury
Ottawa
Toronto
Hamilton
London
L. Superior
L. Michigan
L. Huron
L. Ontario
QUEBEC
Ft. George
Seven Islands
Chicoutimi
Rouyn
Quebec
Montreal
Labrador
Hopedale
Goose Bay
Battle Harbour
Str. of Belle Isle
NEWFOUNDLAND
Gander
St. John's
G. of St. Lawrence
NEW BRUNS.
Fredericton
Saint John
PR. EDWARD I.
NOVA SCOTIA
Halifax
Sable I.
Sydney
Cape Breton I.
UNITED STATES
Butte
Missouri R.
Duluth
Minneapolis
Miss. R.
Boston
New York
PACIFIC OCEAN
ATLANTIC OCEAN

PERSONAL

Name _____

Social Security No. _____

Residence _____

_____

Business Address _____

_____

In case of accident, please notify

_____

_____

Telephone _____

Accident Ins. Policy No. _____

Automobile Information:

License No. _____

Motor No. _____

Model No. _____

_____

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23	24	25	26	27	28	29
30	31	--	--	--	--	--

FEBRUARY

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	--	--	--	--	--
--	--	--	--	--	--	--

MARCH

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	--	--
--	--	--	--	--	--	--

APRIL

S	M	T	W	T	F	S
--	--	--	--	--	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
--	--	--	--	--	--	--

MAY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	--	--	--	--
--	--	--	--	--	--	--

JUNE

S	M	T	W	T	F	S
--	--	--	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	--	--
--	--	--	--	--	--	--

JULY

S	M	T	W	T	F	S
--	--	--	--	--	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	--	--	--	--	--	--

AUGUST

S	M	T	W	T	F	S
--	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	--	--	--
--	--	--	--	--	--	--

SEPTEMBER

S	M	T	W	T	F	S
--	--	--	--	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	--
--	--	--	--	--	--	--

OCTOBER

S	M	T	W	T	F	S
--	--	--	--	--	--	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	--	--	--	--	--

NOVEMBER

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	--	--	--
--	--	--	--	--	--	--

DECEMBER

S	M	T	W	T	F	S
--	--	--	--	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
--	--	--	--	--	--	--

1951

JANUARY

S	M	T	W	T	F	S
--	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	--	--	--
--	--	--	--	--	--	--

FEBRUARY

S	M	T	W	T	F	S
--	--	--	--	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	--	--	--
--	--	--	--	--	--	--

MARCH

S	M	T	W	T	F	S
--	--	--	--	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
--	--	--	--	--	--	--

APRIL

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	--	--	--	--	--
--	--	--	--	--	--	--

MAY

S	M	T	W	T	F	S
--	--	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	--	--
--	--	--	--	--	--	--

JUNE

S	M	T	W	T	F	S
--	--	--	--	--	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
--	--	--	--	--	--	--

JULY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	--	--	--	--
--	--	--	--	--	--	--

AUGUST

S	M	T	W	T	F	S
--	--	--	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	--
--	--	--	--	--	--	--

SEPTEMBER

S	M	T	W	T	F	S
--	--	--	--	--	--	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	--	--	--	--	--	--

OCTOBER

S	M	T	W	T	F	S
--	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	--	--	--
--	--	--	--	--	--	--

NOVEMBER

S	M	T	W	T	F	S
--	--	--	--	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	--
--	--	--	--	--	--	--

DECEMBER

S	M	T	W	T	F	S
--	--	--	--	--	--	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	--	--	--	--	--