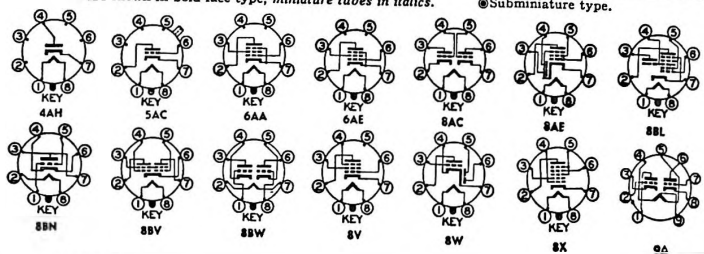
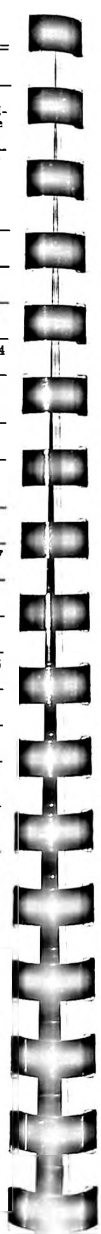
Tube Type	Classification by Construction	Base Connections	Outline Dwg	Type Cathode	Filament Volts	Filament Amp	Max Plate Volts	Max Screen Volts	Capacitance in Micromicrofarads: Input	Output	Grid-plate
7AU7	Medium-Mu Twin Triode	9A	6-2	Htr	7.0 ‖ (3.5¶	0.3 ‖ 0.6¶)	300	—	1.8	2.0	1.5
7B4	High-Mu Triode	5AC	9-30	Htr	6.3	0.3	300	—	3.6	3.4	1.6
7B5	Power Amplifier Pentode	6AE	9-31	Htr	6.3	0.4	315	285	—	—	—
7B6	Duplex-Diode High-Mu Triode	8W	9-30	Htr	6.3	0.3	300	—	—	—	—
7B7	Remote-Cutoff RF Pentode	8V	9-30	Htr	6.3	0.15	300	100	5.0	6.0	0.004 ♣
7B8	Pentagrid Converter	8X♦	9-30	Htr	6.3	0.3	300	100	Osc I_{g1} = 0.4 ma; R_{g1} = 50,000 ohms		
7C4	High-Frequency Diode	4AH	9-30	Htr	6.3	0.15	Tube Voltage Drop: 11 v at 10 ma d-c				
7C5	Beam Power Amplifier	6AA	9-31	Htr	6.3	0.45	315	285	—	—	—
7C6	Duplex-Diode High-Mu Triode	8W	9-30	Htr	6.3	0.15	300	—	—	—	—
7C7	Sharp-Cutoff Pentode	8V	9-30	Htr	6.3	0.15	300	100	5.5	6.5	0.007 ♣
7E5	High-Frequency Triode	8BN	9-30	Htr	6.3	0.15	250	—	3.6	2.8	1.5
7E6	Duplex-Diode Medium-Mu Triode	8W	9-30	Htr	6.3	0.3	250	—	—	—	—
7E7	Duplex-Diode Remote-Cutoff Pentode	8AE	9-30	Htr	6.3	0.3	250	100	4.6	4.6	0.005 ♣
7F7	High-Mu Twin Triode	8AC	9-30	Htr	6.3	0.3	250	—	—	—	—
7F8	High-Frequency Twin Triode	8BW	9-32	Htr	6.3	0.3	300	—	2.8	1.4	1.6
7G7	Sharp-Cutoff Pentode	8V	9-30	Htr	6.3	0.45	250	100	9.0	7.0	0.007 ♣
7G8	Sharp-Cutoff Twin Tetrode	8BV	9-32	Htr	6.3	0.3	300	150	3.4	2.6	0.15 ♣
7H7	Semi-Remote-Cutoff RF Pentode	8V	9-30	Htr	6.3	0.3	300	150	8.0	7.0	0.004 ♣
7J7	Triode Heptode Converter	8BL	9-30	Htr	6.3	0.3	300	100	Osc I_{g1} = 0.4 ma; R_{g1} = 50,000 ohms		

Metal tubes are shown in bold-face type, *miniature tubes in italics.* ◉Subminiature type.





Service	Plate Volts	Screen Volts	Neg Grid Volts	Plate Milliamperes	Screen Milliamperes	R_p, Ohms	G_m, μmhos	μ Factor	Load for Rated Output, Ohms	Power Output, Watts	Tube Type
Class A Amplifier ♣	250	—	8.5	10.5	—	7,700§	2,200	17	—	—	*7AU7*
	100	—	0	11.8	—	6,500§	3,100	20	—	—	
Vertical Deflection Amplifier ♣	Max positive pulse plate voltage, ◉ = 1,200 volts; max plate dissipation = 2.75 watts; max d-c cathode current = 20 ma										
Class A Amplifier	250	—	2.0	0.9	—	66,000	1,500	100	—	—	7B4
Class A Amplifier	315	250	21	25.5†	4.0†	75,000	2,100	—	9,000	4.5	7B5
	250	250	18	32†	5.5†	68,000	2,300	—	7,600	3.4	
Class A Amplifier	250	—	2.0	0.9	—	91,000§	1,100	100	—	—	7B6
	100	—	1.0	0.4	—	110,000§	900	100	—	—	
Class A Amplifier	250	100	3.0	8.5	1.7	750,000	1,750	—	—	—	7B7
	100	100	3.0	8.2	1.8	300,000	1,675	—	—	—	
Converter	250	100	3.0	3.5	2.7	360,000§	550 #	E_{c2} (Osc Plate) = 250 thru 20,000 ohms; I_{c2} = 4.0 ma			7B8
Half-Wave Rectifier	Max d-c output current = 5.0 ma; max rms supply voltage = 117 volts										7C4
Class A Amplifier	315	225	13.0	34†	2.2†	77,000§	3,750	—	8,500	5.5	7C5
	250	250	12.5	45†	4.5†	52,000§	4,100	—	5,000	4.5	
Class A Amplifier	250	—	1.0	1.3	—	100,000§	1,000	100	—	—	7C6
	100	—	0	1.0	—	100,000§	850	85	—	—	
Class A Amplifier	250	100	3.0	2.0	0.5	2,000,000§	1,300	—	—	—	7C7
Class A Amplifier	180	—	3.0	5.5	—	12,000	3,000	36	—	—	7E5
Class A Amplifier	250	—	9.0	9.5	—	8,500	1,900	16	—	—	7E6
Class A Amplifier	250	100	3.0	7.5	1.6	700,000§	1,300	—	—	—	7E7
Class A Amplifier ♣	250	—	2.0	2.3	—	44,000§	1,600	70	—	—	7F7
Class A Amplifier ♣	250	—	R_k = 500	6.0	—	—	3,300	48	—	—	7F8
Class A Amplifier	250	100	2.0	6.0	2.0	800,000§	4,500	—	—	—	7G7
Class A Amplifier ♣	250	100	2.5	4.5	0.8	225,000§	2,100	—	—	—	7G8
Class A Amplifier	250	150	R_k = 180	10	3.2	800,000§	4,000	—	—	—	7H7
	100	100	1.5	7.5	2.6	350,000§	4,000	—	—	—	
Converter	250	100	3.0	1.4	2.8	1,500,000§	290 #	E_b (Triode Osc) = 250 thru 20,000 ohms; I_b (Triode) = 5.0 ma			7J7

§ Approximate.
▲Without external shield.
† Zero signal.
♦ Grids 3 and 5 are screen. Grid 4 is signal-input grid.
Conversion transconductance.
♣Maximum.
▼Grids 2 and 4 are screen. Grid 3 is signal-input grid.
✱Screen supply voltage.
◉Absolute maximum rating.
‡ Plate-to-plate.
♠Per section.
⊕For both sections.
* Minimum.
¶ Heater warm-up time controlled for series-string service.
§ Plate supply voltage.
‖ Input plate.
1—The duration of the pulse voltage must not exceed 15 percent of one scanning cycle.
2—Section 1.
3—Section 2.
4—A resistor of 3 ohms must be put in series with heater.