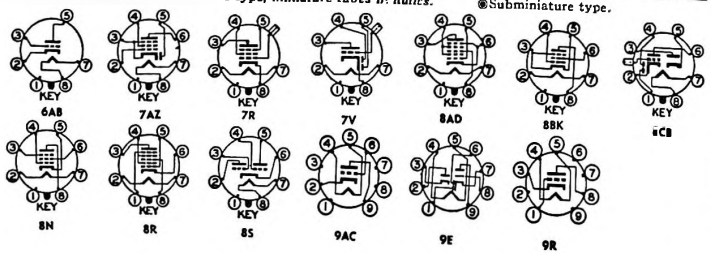
Tube Type	Classification by Construction	Base Connections	Outline Dwg	Type Cathode	Filament Volts	Filament Amp	Max Plate Volts	Max Screen Volts	Capacitance in Micromicrofarads: Input	Output	Grid-plate
6Q7 6Q7-G 6Q7-GT	Duplex-Diode High-Mu Triode	7V	8-4 12-8 9-18	Htr	6.3	0.3	300	—	—	—	—
6R4	High-Frequency Triode	9R	6-2	Htr	6.3₄	0.2	275	—	1.7	0.5	1.5
6R7 6R7-G 6R7-GT	Duplex-Diode Medium-Mu Triode	7V	8-4 12-8 9-17	Htr	6.3	0.3	250	—	4.8	3.8	2.4
6R8	Triple-Diode, Low-Mu Triode	9E	6-2	Htr	6.3	0.45	250	—	—	—	—
6S4 *6S4-A*	Medium-Mu Triode	9AC	6-3	Htr	6.3 6.3¶	0.6 0.6¶	500	—	4.2	0.9	2.6
6S7 6S7-G	Remote-Cutoff RP Pentode	7R	8-2 12-8	Htr	6.3	0.15	300	150	6.5 4.4	10.5 8.0	0.005 ♣ 0.008 ♣
6S8-GT	Triple-Diode High-Mu Triode	8CB	9-23 or 9-48	Htr	6.3	0.3	300	—	—	—	—
6SA7 6SA7-GT	Pentagrid Converter	8R ♥ 8AD ♥	8-1 9-11 or 9-41	Htr	6.3	0.3	300	100	Osc I_{g1} = 0.5 ma R_{g1} = 20,000 ohms		
6SB7-Y	Pentagrid Converter	8R ♥	8-1	Htr	6.3	0.3	300	100	Osc I_{g1} = 0.35 ma R_{g1} = 20,000 ohms		
6SC7 6SC7-GT	High-Mu Twin-Triode	8S	8-1 9-11	Htr	6.3	0.3	250	—	—	—	—
6SD7-GT	Semi-Remote-Cutoff Pentode	8N	9-12	Htr	6.3	0.3	300	125	9.0	7.5	0.0035 ♣
6SE7-GT	Sharp-Cutoff Pentode	8N	9-12	Htr	6.3	0.3	300	125	8.0	7.5	0.005 ♣
6SF5 6SF5-GT	High-Mu Triode	6AB	8-1 9-11	Htr	6.3	0.3	300	—	—	—	—
6SF7	Diode Remote-Cutoff Pentode	7AZ	8-1	Htr	6.3	0.3	300	100	5.5	6.0	0.004 ♣
6SG7 6SG7-GT	Semi-Remote-Cutoff RF Pentode	8BK	8-1 9-12	Htr	6.3	0.3	300	150	8.5 8.5	7.0 7.0	0.003 ♣ 0.0035 ♣
6SH7 6SH7-GT	Sharp-Cutoff RF Pentode	8BK	8-1 9-12	Htr	6.3	0.3	300	150	8.5	7.0	0.003 ♣
6SJ7 6SJ7-GT	Sharp-Cutoff Pentode	8N	8-1 9-12	Htr	6.3	0.3	300 250	150 —	Pentode Connection Triode Connection (G_1, G_2 & P tied)		
6SK7 6SK7-W 6SK7-GT	Remote-Cutoff RF Pentode	8N	8-1 8-1 9-12	Htr	6.3	0.3	300	150	6.0 6.5	7.0 7.5	0.003 ♣ 0.005 ♣

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	250 100	— —	3.0 1.0	1.0 0.8	— —	58,000 58,000	1,200 1,200	70 70	— —	— —	6Q7 6Q7-G 6Q7-GT
Class A Amplifier	150 120	— —	2.0' 2.0	30 20	— —	— —	5,500 4,000	16 16	— —	— —	*6R4*
Class A Amplifier	250	—	9.0	9.5	—	8,500	1,900	16	—	—	6R7 6R7-G 6R7-GT
Class A Amplifier	250	—	9.0	9.5	—	8,500	1,900	16	10,000	0.30	*6R8*
Vertical Deflection Amplifier	250	—	8.0	26	—	3,600§	4,500	16	—	—	*6S4* *6S4-A*
Max positive pulse plate voltage: ▣ = 2,200 volts; max plate dissipation = 7.5 watts; max d-c cathode current = 30 ma											
Class A Amplifier	250	100	3.0	8.5	2.0	1,000,000§	1,750	—	—	—	6S7 6S7-G
Class A Amplifier	250	—	2.0	0.9	—	91,000§	1,100	100	—	—	6S8-GT
Converter	250 100	100 100	2.0 2.0	3.5 3.3	8.5 8.5	1,000,000§ 500,000§	450‡ 425‡	— —	— —	— —	6SA7 6SA7-GT
Converter	250	100	1.0	3.8	10	1,000,000§	950‡	—	—	—	6SB7-Y
Class A Amplifier♣	250	—	2.0	2.0	—	53,000§	1,325§	70	—	—	6SC7 6SC7-GT
Class A Amplifier	250	125	2.0	9.5	3.0	700,000	4,250	—	—	—	6SD7-GT
Class A Amplifier	250	100	1.5	4.5	1.5	1,000,000	3,400	—	—	—	6SE7-GT
Class A Amplifier	250 100	— —	2.0 1.0	0.9 0.4	— —	60,000 85,000	1,500 1,150	100 100	— —	— —	6SF5 6SF5-GT
Class A Amplifier	250	100	1.0	12.4	3.3	700,000§	2,050	—	—	—	6SF7
Class A Amplifier	250 250 100	150 125 100	2.5 1.0 1.0	9.2 11.8 8.2	3.4 4.4 3.2	1,000,000* 900,000 250,000	4,000 4,700 4,100	— — —	— — —	— — —	6SG7 6SG7-GT
Class A Amplifier	250	150	1.0	10.8	4.1	900,000§	4,900	—	—	—	6SH7 6SH-7GT
Class A Amplifier Class A Amplifier Class A Amplifier	250 100 250 180	100 100 — —	3.0 3.0 8.5 6.0	3.0 2.9 9.2 6.0	0.8 0.9 — —	1,000,000* 700,000 7,600 8,200	1,650 1,575 2,500 2,300	— — 19 19	— — — —	— — — —	6SJ7 6SJ7-GT
Class A Amplifier	250 100	100 100	3.0 1.0	9.2 13	2.6 4.0	800,000§ 120,000§	2,000 2,350	— —	— —	— —	6SK7 6SK7-W 6SK7-GT

§ 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.
₂—The duration of the pulse voltage must not exceed 15 percent of one scanning cycle.
₁—Section 1.
₂—Section 2.
₄—A resistor of 3 ohms must be put in series with heater.