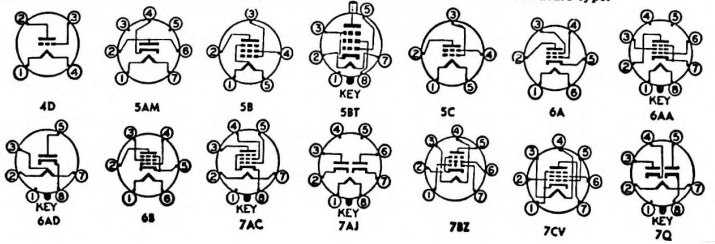
Tube Type	Classification by Construction	Base Connections	Outline Dwg	Type Cathode	Filament Volts	Filament Amp	Max Plate Volts	Max Screen Volts	Capacitance in Micromicrofarads: Input	Output	Grid-plate
42	Power Amplifier Pentode	6B	14–1	Htr	6.3	0.7	375	285	—	—	—
43	Power Amplifier Pentode	6B	14–1	Htr	25.0	0.3	160	135	8.5	12.5	0.2
45	Power Amplifier Triode	4D	14–1	Fil	2.5	1.5	275	—	4.0	3.0	7.0
45Z3	Half-Wave High-Vacuum Rectifier	5AM	5–2	Htr	45.0	0.075	Tube Voltage Drop: 23 v at 130 ma d-c				
45Z5-GT	Half-Wave High-Vacuum Rectifier	6AD	9–11	Htr	45.0	0.15	Tube Voltage Drop: 16 v at 200 ma d-c				
46	Dual-Grid Power Amplifier	5C	16–1	Fil	2.5	1.75	400	—	Single tube (G_2 & P tied)		
47	Power Amplifier Pentode	5B	16–1	Fil	2.5	1.75	250	250	8.6	13.0	1.2
48	Power Amplifier Tetrode	6A	16–1	Htr	30.0 DC	0.4	125	100	—	—	—
49	Dual-Grid Power Amplifier	5C	14–1	Fil	2.0 DC	0.12	135	—	Single tube (G_2 & P tied)		
50	Power Amplifier Triode	4D	T-X	Fil	7.5	1.25	450	—	4.2	3.4	7.1
50A5	Beam Power Amplifier	6AA	9–31	Htr	50.0	0.15	200	125	—	—	—
50AX6-G	Full-Wave High-Vacuum Rectifier	7Q	14–3	Htr	50.0	0.3	Tube Voltage Drop: ♠ 21 v at 250 ma d-c				
50B5	Beam Power Amplifier	7BZ	5–3	Htr	50.0	0.15	135	117	13.0▲	6.5▲	0.50▲
50C5	Beam Power Amplifier	7CV	5–3	Htr	50.0	0.15	135	117	13.0▲	6.1▲	0.64▲
50C6-G 50C6-GA	Beam Power Amplifier	7AC	14–3 T-X	Htr	50	0.15	200	200✱	—	—	—
50CD6-G	Beam Power Amplifier	5BT	16–5	Htr	50.0	0.3	700§	175	25▲	9.5▲	0.6▲
50L6-GT	Beam Power Amplifier	7AC	9–11 or 9–41	Htr	50.0	0.15	200	125	—	—	—
50X6	High-Vacuum Rectifier-Doubler	7AJ	9–31	Htr	50.0	0.15	Tube Voltage Drop: ♠ 22 v at 150 ma d-c				

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	285	285	20	38†	7.0†	78,000§	2,550	—	7,000	4.8	42
Class A Amplifier	160	120	18	33†	6.5†	42,000	2,375	—	5,000	2.2	43
Class A Amplifier	275	—	56	36†	—	1,700	2,050	3.5	4,600	2.0	45
Half-Wave Rectifier	Max d-c output current = 65 ma; max peak inverse voltage = 350 v; max rms supply voltage = 117 volts; max peak current = 390 ma										*45Z3*
Half-Wave Rectifier	Max d-c output current = 100 ma; max peak inverse voltage = 700 volts; max rms supply voltage = 235 volts; max peak current = 600 ma. With panel lamp #40 or #47 between pins 2 and 3 and no shunting resistor, max d-c output current = 60 ma. With panel lamp and 250 ohm shunting resistor (max), max d-c output = 90 ma										45Z5-GT
Class A Amplifier	250	—	33	32†	—	2,380	2,350	5.6	6,400	1.25	46
Class A Amplifier	250	250	16.5	31†	6.0†	60,000	2,500	—	7,000	2.7	47
Class A Amplifier	125	100	20	56	9.5	—	3,900	—	1,500	2.5	48
Class A Amplifier	135	—	20	6.0	—	4,175	1,125	4.7	11,000	0.170 §	49
Class A Amplifier	450	—	84	55	—	1,800	2,100	3.8	4,350	4.6	*50
Class A Amplifier	200	125	R_k = 180	46†	2.2†	28,000§	8,000	—	4,000	3.8	50A5
	110	110	7.5	49†	4.0†	13,000§	8,000	—	2,000	2.1	
Full-Wave Rectifier	Max d-c output current = 250 ma; max peak inverse voltage = 1250 volts; rms supply voltage per plate = 350 volts; max peak current per plate = 600 ma										50AX6-G
TV Damper Service	Max d-c output current per plate = 125 ma; max peak inverse voltage = 2000 volts; max peak current per plate = 600 ma										
Class A Amplifier	110	110	7.5	49†	4.0†	10,000§	7,500	—	2,500	1.9	*50B5*
Class A Amplifier	110	110	7.5	49†	4.0†	10,000§	7,500	—	2,500	1.9	*50C5*
Class A Amplifier	135	135	13.5	58†	3.6†	9,300§	7,000	—	2,000	3.6	50C6-G
	200	135	14	61†	2.2†	18,300§	7,100	—	2,600	6.0	50C6-GA
Horizontal Deflection Amplifier	175	175	30	75	5.5	7,200§	7,700	—	—	—	50CD6-G
	60	100	0	230	21	—	—	—	—	—	
	Max positive pulse plate voltage = 6600 volts; max plate dissipation = 15 watts; max screen dissipation = 3.0 watts; max d-c cathode current = 200 ma										
Class A Amplifier	200	125	R_k = 180	46†	2.2†	28,000§	8,000	—	4,000	3.8	50L6-GT
	110	110	7.5	49†	4.0†	13,000§	8,000	—	2,000	2.1	
Rectifier or Doubler	Max d-c output current per plate = 75 ma; max peak inverse voltage = 700 volts; rms supply voltage per plate = 235 volts; max peak current per plate = 450 ma										50X6

§ 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.
‡—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.