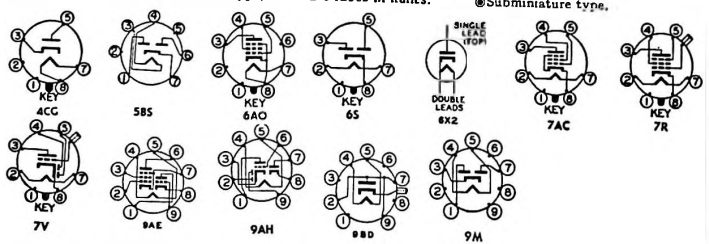
| Tube Type | Classification by Construction | Base Connections | Outline Dwg | Type Cathode | Filament Volts | Filament Amp | Max Plate Volts | Max Screen Volts | Capacitance in Micromicrofarads: Input | Output | Grid-plate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *6U8* | Triode-Pentode | 9AE | 6-2 | Htr | 6.3 | 0.45 | 300 | 150 | Pentode Section | | |
| | | | | | | | 300 | — | Triode Section | | |
| *6V3*<br>*6V3-A* | Half-Wave High-Vacuum Rectifier | 9BD | 6-7<br>T-X | Htr | 6.3 | 1.75 | Tube Voltage Drop: 19 v at 250 ma d-c | | | | |
| *6V4* | Full-Wave, High-Vacuum Rectifier | 9M | 6-4 | Htr | 6.3 | 0.6 | Tube Voltage Drop: ♠ 20 v at 45 ma d-c | | | | |
| 6V5-GT | Beam Power Amplifier | 6AO | 9-11 | Htr | 6.3 | 0.45 | 315 | 285 | — | — | — |
| **6V6** | Beam Power Amplifier | 7AC | 8-6 | Htr | 6.3 | 0.45 | 315 | 285 | Single Tube | | |
| | | | | | | | | | 2 Tubes, Push-pull | | |
| 6V6-GT | Beam Power Amplifier | 7AC | 9-11 or 9-41 | Htr | 6.3 | 0.45 | 315 | 285 | Single Tube | | |
| | | | | | | | — | — | 2 Tubes, Push-Pull | | |
| | | | | | | | 315 | — | Triode Connection ($G_2$ & P tied) | | |
| 6V7-G | Duplex-Diode Medium-Mu Triode | 7V | 12-8 | Htr | 6.3 | 0.3 | 250 | — | 2.0 | 3.5 | 1.7 |
| *6V8* | Triple-Diode, High-Mu Triode | 9AH | 6-2 | Htr | 6.3 | 0.45 | 300 | — | — | — | — |
| *6W2* | Half-Wave High-Voltage Rectifier | 6X2 | T-X | Htr | 6.3 | 0.08 | — | — | — | — | — |
| 6W4-GT | Half-Wave High-Vacuum Rectifier | 4CG | 9-11 or 9-41 | Htr | 6.3 | 1.2 | Tube Voltage Drop: 21 v at 250 ma d-c | | | | |
| 6W5-G | Full-Wave High-Vacuum Rectifier | 6S | 12-7 | Htr | 6.3 | 0.9 | Tube Voltage Drop: ♠ 24 v at 90 ma d-c | | | | |
| 6W6-GT | Beam Power Amplifier | 7AC | 9-11 or 9-41 | Htr | 6.3 | 1.2 | 300 | 150 | Pentode Connection | | |
| | | | | | | | 300 | — | Triode Connection ($G_2$ & P tied) | | |
| 6W7-G | Sharp-Cutoff Pentode | 7R | 12-8 | Htr | 6.3 | 0.15 | 300 | 300 | 5.0 | 8.5 | 0.007 ♣ |
| *6X2* | Half-Wave High-Voltage Rectifier | 6X2 | T-X | Htr | 6.3 | 0.09 | — | — | — | — | — |
| *6X4* | Full-Wave High-Vacuum Rectifier | 5BS | 5-3 | Htr | 6.3 | 0.6 | Tube Voltage Drop: ♠ 22 v at 70 ma d-c | | | | |
| 6X5<br>6X5-GT | Full-Wave High-Vacuum Rectifier | 6S | 8-6<br>9-11 | Htr | 6.3 | 0.6 | Tube Voltage Drop: ♠ 22 v at 70 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 | 250 | 110 | $R_k$ = 68 | 10 | 3.5 | 400,000§ | 5,200 | — | — | — | *6U8* |
| Class A Amplifier | 150 | — | $R_k$ = 56 | 18 | — | 5,000§ | 8,500 | 40 | — | — | |
| TV Damper Service₃ | Max d-c output current = 135 ma; max peak inverse voltage ⊡ = 6000 volts; max peak current = 800 ma | | | | | | | | | | *6V3*<br>*6V3-A* |
| Full-Wave Rectifier | Max d-c output current = 90 ma; rms supply voltage per plate = 350 volts | | | | | | | | | | *6V4* |
| Class A Amplifier | 315 | 225 | 13 | 34† | 2.2† | 77,000§ | 3,750 | — | 8,500 | 5.5 | 6V5-GT |
| | 250 | 250 | 12.5 | 45† | 4.5† | 52,000§ | 4,100 | — | 5,000 | 4.5 | |
| Class A Amplifier | 315 | 225 | 13 | 34† | 2.2† | 80,000§ | 3,750 | — | 8,500 | 5.5 | **6V6** |
| | 250 | 250 | 12.5 | 45† | 4.5† | 50,000§ | 4,100 | — | 5,000 | 4.5 | |
| | 180 | 180 | 8.5 | 29† | 3† | 50,000§ | 3,700 | — | 5,500 | 2.0 | |
| Class $AB_1$ Amplifier | 285 | 285 | 19 | 70† | 4† | 70,000§ | 3,600 | — | 8000‡ | 14 | |
| | 250 | 250 | 15 | 70† | 5† | 60,000§ | 3,750 | — | 10000‡ | 10 | |
| Class A Amplifier | 315 | 225 | 13 | 34† | 2.2† | 80,000§ | 3,750 | — | 8,500 | 5.5 | 6V6-GT |
| | 250 | 250 | 12.5 | 45† | 4.5† | 50,000§ | 4,100 | — | 5,000 | 4.5 | |
| | 180 | 180 | 8.5 | 29† | 3.0† | 50,000§ | 3,700 | — | 5,500 | 2.0 | |
| Class $AB_1$ Amplifier | 285 | 285 | 19 | 70† | 4.0† | — | — | — | 8,000‡ | 14 | |
| | 250 | 250 | 15 | 70† | 5.0† | — | — | — | 10000‡ | 10 | |
| Vertical Deflection Amplifier | 250 | — | 12.5 | 49.5 | — | 1,960§ | 5,000 | 9.8 | — | — | |
| | Max positive pulse plate voltage⊡ = 1200 volts; max plate dissipation = 9 watts; max d-c cathode current = 35 ma | | | | | | | | | | |
| Class A Amplifier. | 250 | — | 20 | 8.0 | — | 7,500 | 1,100 | 8.3 | 20,000 | 0.350 | 6V7-G |
| Class A Amplifier | 250 | — | 3.0 | 1.0 | — | 58,000§ | 1,200 | 70 | — | — | *6V8* |
| | 100 | — | 1.0 | 0.8 | — | 54,000§ | 1,300 | 70 | — | — | |
| TV Flyback Rectifier₃ | Max d-c output current = 0.5 ma; max peak inverse voltage ⊡ = 25,000 volts | | | | | | | | | | *6W2* |
| TV Damper Service₃ | Max d-c output current = 125 ma; max peak inverse voltage ⊡ = 3850 volts; max peak current = 750 ma | | | | | | | | | | 6W4-GT |
| Full-Wave Rectifier | Max d-c output current = 90 ma; max peak inverse voltage = 1250 volts; max rms supply voltage per plate = 325 volts; max peak current per plate = 270 ma | | | | | | | | | | 6W5-G |
| Class A Amplifier | 200 | 125 | $R_k$ = 180 | 46† | 2.2† | 28,000§ | 8,000 | — | 4,000 | 3.8 | 6W6-GT |
| | 110 | 110 | 7.5 | 49† | 4.0† | 13,000§ | 8,000 | — | 2,000 | 2.1 | |
| Vertical Deflection Amplifier | 225 | — | 30 | 22 | — | 1,600§ | 3,800 | 6.2 | — | — | |
| | Max positive pulse plate voltage⊡ = 1200 volts; max plate dissipation = 7.5 watts; max d-c cathode current = 40 ma | | | | | | | | | | |
| Class A Amplifier | 250 | 100 | 3.0 | 2.0 | 0.5 | 1,500,000§ | 1,225 | — | — | — | 6W7-G |
| TV Flyback Rectifier₃ | Max d-c output current = 0.2 ma; max peak inverse voltage = 17,000 volts; max peak current = 80 ma | | | | | | | | | | *6X2* |
| Full-Wave Rectifier | Max d-c output current = 70 ma; max peak inverse voltage = 1250 volts; rms supply voltage per plate = 325 volts; max peak current per plate = 210 ma | | | | | | | | | | *6X4* |
| Full-Wave Rectifier | Max d-c output current = 70 ma; max peak inverse voltage = 1250 volts; rms supply voltage per plate = 325 volts; max peak current per plate = 210 ma | | | | | | | | | | 6X5<br>6X5-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.