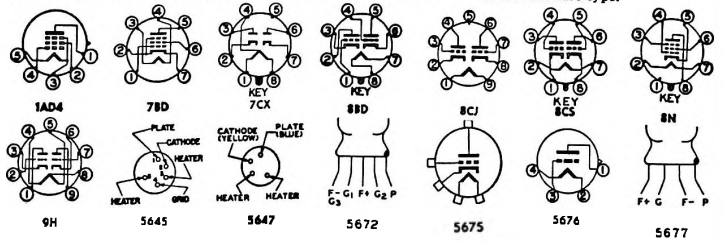
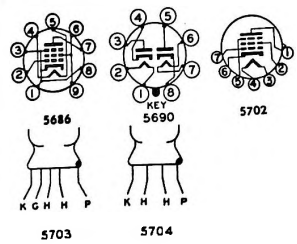
| Tube Type | Classification by Construction | Base Connections | Outline Dwg | Type Cathode | Filament Volts | Filament Amp | Max Plate Volts | Max Screen Volts | Capacitance in Micromicrofarads: Input | Output | Grid-plate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5646 ◉ | High-Mu Triode | 5645 | T-X | Htr | 6.3 | 0.15 | 150 | — | 2.2▲ | 1.0▲ | 1.3▲ |
| 5647 ◉ | High-Frequency Diode | 5647 | T-X | Htr | 6.3 | 0.15 | Tube Voltage Drop: 2.8 v at 18 ma d-c | | | | |
| *5654* | Sharp-Cutoff RF Pentode (Special 6AK5) | 7BD | 5–1 | Htr | 6.3 | 0.175 | 180 | 125 | 4.0 | 2.9 | 0.02 ♣ |
| *5670* | High-Frequency Twin Triode (Special 2C51) | 8CJ | 6-1 | Htr | 6.3 | 0.35 | 300 | — | 2.2▲ | 1.0▲ | 1.1▲ |
| 5672 ◉ | Power Amplifier Pentode | 5672 | 2–1 | Fil | 1.25 DC | 0.05 | 90 | 90 | — | — | — |
| 5675 | Medium-Mu Triode (Pencil) | 5675 | T-X | Htr | 6.3 | 0.135 | 150 | — | 2.3▲ | 0.09▲ | 1.3▲ |
| 5676 ◉ | Medium-Mu Triode | 5676 | T-X | Fil | 1.25 DC | 0.12 | 135 | — | 1.3 | 4.0 | 2.0 |
| 5677 ◉ | Medium-Mu Triode | 5677 | T-X | Fil | 1.25 DC | 0.06 | 135 | — | 1.3 | 3.8 | 2.0 |
| 5678 ◉ | Pentode Amplifier | 1AD4 | T-X | Fil | 1.25 DC | 0.05 | 90 | 67.5 | 3.3 | 3.8 | 0.01 ♣ |
| 5679 | Twin Diode (Special 7A6) | 7CX | 9–30 | Htr | 6.3 | 0.15 | Tube Voltage Drop: ♠ 11 v at 16 ma d-c | | | | |
| *5686* | Beam Power Amplifier | 5686 | 6–2 | Htr | 6.3 | 0.35 | 250<br>250 | 250<br>250 | 6.5 | 8.5 | 0.08 ♣ |
| *5687* | Medium-Mu Twin Triode | 9H | 6–2 | Htr | { 6.3<br>{ 12.6 | 0.9<br>0.45 } | 300 | — | 4.0▲ | 0.6₁▲<br>0.5₂▲ | 4.0▲ |
| 5690 | Full-Wave High-Vacuum Rectifier | 5690 | T-X | Htr | { 12.6<br>{ 6.3 | 1.2 }<br>2.4 } | Tube Voltage Drop: ♠ 17 v at 150 ma d-c | | | | |
| 5691 | High-Mu Twin Triode (Special 6SL7-GT) | 8BD | 9–37 | Htr | 6.3 | 0.6 | 275 ⊞ | — | — | — | — |
| 5692 | Medium-Mu Twin Triode (Special 6SN7-GT) | 8BD | 9–37 | Htr | 6.3 | 0.6 | 275 ⊞ | — | — | — | — |
| 5693 | Sharp-Cutoff Pentode (Special 6SJ7) | 8N | 8–1 | Htr | 6.3 | 0.3 | 300 ⊞ | 125 ⊞ | 5.3 | 6.2 | 0.005 ♣ |
| 5694 | Medium-Mu Twin Triode | 8CS | 14–3 | Htr | 6.3 | 0.8 | 300 | — | Both Sections in Parallel | | |
| 5702 ◉ | RF Pentode | 5702 | 3–7 | Htr | 6.3 | 0.2 | 180 | 140 | 4.4 | 3.5 | 0.03 ♣ |
| 5703 ◉ | Medium-Mu Triode | 5703 | 3–6 | Htr | 6.3 | 0.2 | 250 | — | 2.6 | 0.7 | 1.2 |
| 5704 ◉ | Diode | 5704 | T-X | Htr | 6.3 | 0.15 | Tube Voltage Drop: 2 v at 9 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 | 100 | — | $R_k$ = 820 | 1.4 | — | 29,000 | 2,400 | 70 | | | 5646 ◉ |
| Half-Wave Rectifier | Max d-c output current ⊞ = 10 ma; max peak inverse voltage ⊞ = 460 volts; max rms supply voltage ⊞ = 165 volts; max peak current ⊞ = 60 ma | | | | | | | | | | 5647 ◉ |
| Class A Amplifier | 120 | 120 | $R_k$ = 200 | 7.5 | 2.5 | 340,000§ | 5,000 | — | | | *5654* |
| Class A Amplifier ♠<br>Class $AB_1$ Amplifier | 150<br>300 | —<br>— | $R_k$ = 240<br>$R_k$ = 800 ⊕ | 8.2<br>9.8† | —<br>— | 6,400§<br>— | 5,500<br>— | 35<br>— | —<br>27,000 ‡ | —<br>1.0 | *5670* |
| Class A Amplifier | 67.5 | 67.5 | 6.5 | 3.25 | 1.1 | — | 650 | — | 20,000 | 0.065 | 5672 ◉ |
| Class A Amplifier | 135 | — | $R_k$ = 68 | 24 | — | 3,225 | 6,200 | 20 | — | — | 5675 |
| Class A Amplifier | 135 | — | 5.0 | 4.0 | — | — | 1,600 | 15 | — | — | 5676 ◉ |
| Class A Amplifier | 135 | — | 6.0 | 1.9 | — | — | 650 | 13.5 | — | — | 5677 ◉ |
| Class A Amplifier | 67.5 | 67.5 | 0 | 1.8 | 0.48 | 1,000,000 | 1,100 | — | — | — | 5678 ◉ |
| Half-Wave Rectifier | Max d-c output current per plate = 8 ma; max rms supply voltage per plate = 150 volts; max peak current per plate = 45 ma | | | | | | | | | | 5679 |
| Class A Amplifier<br>Class C Amplifier | 250<br>250 | 250<br>250 | 12.5<br>50 | 27†<br>40 | 3.0†<br>10.5 | 45,000§<br>Input Signal = 0.15 watt§ | 3,100 | — | 9,000<br>— | 2.7<br>6.5§ | *5686* |
| Class A Amplifier ♠ | 180<br>250 | —<br>— | 7.0<br>12.5 | 21<br>12.5 | —<br>— | 2,100<br>3,000§ | 8,250<br>5,500 | 17.5<br>16.5 | —<br>— | —<br>— | *5687* |
| Full-Wave Rectifier | Max d-c output current = 125 ma; max peak inverse voltage = 1,120 volts; rms supply voltage per plate = 350 volts; max peak current per plate = 375 ma | | | | | | | | | | 5690 |
| Class A Amplifier ♠ | 250 | — | 2.0 | 2.3 | — | 44,000 | 1,600 | 70 | — | — | 5691 |
| Class A Amplifier ♠ | 250 | — | 9.0 | 6.5 | — | 9,100 | 2,200 | 20 | — | — | 5692 |
| Class A Amplifier | 250 | 100 | 3.0 | 3.0 | 0.85 | 1,000,000 * | 1,650 | — | — | — | 5693 |
| Class A Amplifier | 294<br>250 | —<br>— | 6.0<br>5.0 | 7.0<br>6.0 | —<br>— | 11,000<br>11,300 | 3,200<br>3,100 | 35<br>35 | —<br>— | —<br>— | 5694 |
| Class A Amplifier | 120 | 120 | $R_k$ = 200 | 7.5 | 2.5 | 340,000 | 5,000 | — | | | 5702 ◉ |
| Class A Amplifier | 120 | — | $R_k$ = 220 | 9.0 | — | — | 5,000 | 25 | | | 5703 ◉ |
| Half-Wave Rectifier | Max d-c output current = 9 ma; max peak inverse voltage = 420 volts; max rms supply voltage = 150 volts; max peak current = 54 ma | | | | | | | | | | 5704 ◉ |




▲Without external shield.
⊞Absolute maximum rating.
♣Maximum.
♠Per Section
1—Section 1.
⊕For both sections.
† Zero signal.
§ Approximate.
‡ Plate-to-plate.
2—Section 2.
* Minimum.