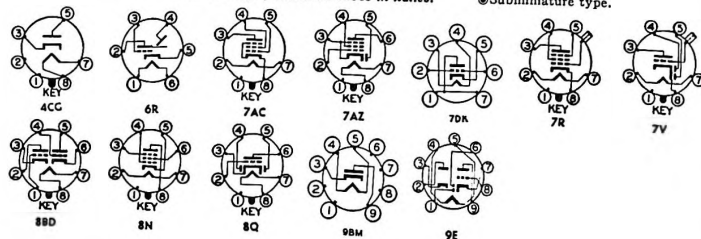


| Tube Type            | Classification by Construction  | Base Connections | Out-line Dwg | Type Cathode | Filament Volts | Filament Amp | Max Plate Volts                           | Max Screen Volts                                     | Capacitance in Micromicrofarads |                             |                             |
|----------------------|---------------------------------|------------------|--------------|--------------|----------------|--------------|-------------------------------------------|------------------------------------------------------|---------------------------------|-----------------------------|-----------------------------|
|                      |                                 |                  |              |              |                |              |                                           |                                                      | Input                           | Output                      | Grid-plate                  |
| 6SL7-GT<br>6SL7-WGT  | High-Mu Twin-Triode             | 8BD              | 9-11 or 9-41 | Htr          | 6.3            | 0.3          | 300                                       | —                                                    | —                               | —                           | —                           |
| 6SN7-GT<br>6SN7-WGT  | Medium-Mu Twin Triode           | 8BD              | 9-11 or 9-41 | Htr          | 6.3            | 0.6          | 300                                       | —                                                    | 2.8, $\Delta$ 3.0, $\Delta$     | 0.8, $\Delta$ 1.2, $\Delta$ | 3.8, $\Delta$ 4.0, $\Delta$ |
| 6SN7-GTA<br>6SN7-GTB | Medium-Mu Twin Triode           | 8BD              | 9-11 or 9-41 | Htr          | 6.3            | 0.6          | 450                                       | —                                                    | 2.2, $\Delta$ 2.6, $\Delta$     | 0.7, $\Delta$ 3.8, $\Delta$ | 4.0, $\Delta$               |
| 6SQ7<br>6SQ7-GT      | Duplex-Diode, High-Mu Triode    | 8Q               | 8-1 or 9-12  | Htr          | 6.3            | 0.3          | 300                                       | —                                                    | 3.2, $\Delta$ 4.2, $\Delta$     | 3.0, $\Delta$ 3.4, $\Delta$ | 1.6, $\Delta$ 1.8, $\Delta$ |
| 6SR7<br>6SR7-GT      | Duplex-Diode Medium-Mu Triode   | 8Q               | 8-1 or 9-11  | Htr          | 6.3            | 0.3          | 250                                       | —                                                    | 3.6, $\Delta$                   | 2.8, $\Delta$               | 2.4, $\Delta$               |
| 6SS7                 | Remote-Cutoff RF Pentode        | 8N               | 8-1          | Htr          | 6.3            | 0.15         | 300                                       | 100                                                  | 5.5                             | 7.0                         | 0.004 $\Delta$              |
| 6ST7                 | Duplex-Diode Medium-Mu Triode   | 8Q               | 8-1          | Htr          | 6.3            | 0.15         | 250                                       | —                                                    | 2.8                             | 3.0                         | 1.5                         |
| 6SU7-GTY             | High-Mu Twin-Triode             | 8BD              | 9-11         | Htr          | 6.3            | 0.3          | 250                                       | —                                                    | —                               | —                           | —                           |
| 6SV7                 | Diode Sharp-Cutoff RF Pentode   | 7AZ              | 8-1          | Htr          | 6.3            | 0.3          | 300                                       | 150                                                  | 6.5                             | 6.0                         | 0.004 $\Delta$              |
| 6SZ7                 | Duplex-Diode High-Mu Triode     | 8Q               | 8-1          | Htr          | 6.3            | 0.15         | 300                                       | —                                                    | 2.6                             | 2.8                         | 1.1                         |
| 6T4                  | UHF Triode Oscillator           | 7DK              | 5-1          | Htr          | 6.3            | 0.225        | 200                                       | —                                                    | 2.6 $\Delta$                    | 0.4 $\Delta$                | 1.7 $\Delta$                |
| 6T5                  | Electron-Ray Indicator          | 6R               | 9-26         | Htr          | 6.3            | 0.3          | 250                                       | —                                                    | —                               | —                           | —                           |
| 6T7-G                | Duplex-Diode High-Mu Triode     | 7V               | 12-8         | Htr          | 6.3            | 0.15         | 250                                       | —                                                    | 1.8                             | 3.1                         | 1.7                         |
| 6T8                  | Triple-Diode High-Mu Triode     | 9E               | 6-2          | Htr          | 6.3            | 0.45         | 300                                       | —                                                    | 1.6 $\Delta$                    | 1.0 $\Delta$                | 2.2 $\Delta$                |
| 6U3                  | Half-Wave High-Vacuum Rectifier | 9BM              | 6-4          | Htr          | 6.3            | 0.9          | Tube Voltage Drop: 16 volts at 180 ma d-c |                                                      |                                 |                             |                             |
| 6U4-GT               | Half-Wave High-Vacuum Rectifier | 4CG              | 9-13         | Htr          | 6.3            | 1.2          | Tube Voltage Drop: 21 v at 250 ma d-c     |                                                      |                                 |                             |                             |
| 6U5                  | Electron-Ray Indicator          | 6R               | 9-26         | Htr          | 6.3            | 0.3          | 285 $\Delta$                              | Max target voltage = 285<br>Min target voltage = 125 |                                 |                             |                             |
| 6U6-GT               | Beam Power Amplifier            | 7AC              | 9-11         | Htr          | 6.3            | 0.75         | 200                                       | 135                                                  | —                               | —                           | —                           |
| 6U7-G                | Remote-Cutoff RF Pentode        | 7R               | 12-4         | Htr          | 6.3            | 0.3          | 300                                       | 100                                                  | 5.0                             | 9.0                         | 0.007 $\Delta$              |

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

③ Subminiature type.



| Service                                 | Plate Volts                                                                                                                                                                                                                            | Screen Volts | Neg Grid Volts       | Plate Milli-amperes | Screen Milli-amperes | R <sub>p</sub> Ohms  | G <sub>m</sub> $\mu$ mhos | # Factor   | Load for Rated Output, Ohms | Power Output, Watts | Tube Type            |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|---------------------|----------------------|----------------------|---------------------------|------------|-----------------------------|---------------------|----------------------|
|                                         |                                                                                                                                                                                                                                        |              |                      |                     |                      |                      |                           |            |                             |                     |                      |
| Class A Amplifier $\Delta$              | 250                                                                                                                                                                                                                                    | —            | 2.0                  | 2.3                 | —                    | 44,000               | 1600                      | 70         | —                           | —                   | 6SL7-GT<br>6SL7-WGT  |
| Class A Amplifier $\Delta$              | 250<br>80                                                                                                                                                                                                                              | —            | 8.0<br>0             | 9.0<br>—            | —                    | 7,700<br>6,700       | 2600<br>3000              | 20<br>20   | —                           | —                   | 6SN7-GT<br>6SN7-WGT  |
| Class A Amplifier $\Delta$              | 250<br>80                                                                                                                                                                                                                              | —            | 8.0<br>0             | 9.0<br>—            | —                    | 7,700<br>6,700       | 2,600<br>3,000            | 20<br>20   | —                           | —                   | 6SN7-GTA<br>6SN7-GTB |
| Vertical Deflection Amplifier $\Delta$  | Max positive pulse plate voltage = 1500 volts; max plate dissipation = 5.0 watts; max pulse dissipation = 7.5 watts; max d-c cathode current = 20 ma                                                                                   |              |                      |                     |                      |                      |                           |            |                             |                     |                      |
| Class A Amplifier                       | 250<br>100                                                                                                                                                                                                                             | —            | 2.0<br>1.0           | 1.1<br>0.5          | —                    | 85,000<br>110,000    | 1175<br>925               | 100<br>100 | —                           | —                   | 6SQ7<br>6SQ7-GT      |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                    | —            | 9.0                  | 9.5                 | —                    | 8,500                | 1,900                     | 16         | —                           | —                   | 6SR7<br>6SR7-GT      |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                    | 100          | 3.0                  | 9.0                 | 2.0                  | 1,000,000            | 1,850                     | —          | —                           | —                   | 6SS7                 |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                    | —            | 9.0                  | 9.5                 | —                    | 8,500                | 1,900                     | 16         | —                           | —                   | 6ST7                 |
| Class A Amplifier $\Delta$              | 250                                                                                                                                                                                                                                    | —            | 2.0                  | 2.3                 | —                    | 44,000               | 1,600                     | 70         | —                           | —                   | 6SU7-GTY             |
| Class A Amplifier                       | 250<br>100                                                                                                                                                                                                                             | 150<br>100   | 1.0<br>1.0           | 7.5<br>3.7          | 2.8<br>1.4           | 1,500,000<br>700,000 | 3,600<br>2,600            | —          | —                           | —                   | 6SV7                 |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                    | —            | 3.0                  | 1.0                 | —                    | 58,000               | 1,200                     | 70         | —                           | —                   | 6SZ7                 |
| Class A Amplifier                       | 80                                                                                                                                                                                                                                     | —            | R <sub>k</sub> = 150 | 18                  | —                    | 1,860                | 7,000                     | 13         | —                           | —                   | 6T4                  |
| Tuning Indicator                        | Plate voltage = 250 thru 1 meg. target voltage = 250 (E <sub>k</sub> = -22 volts for max illumination) (E <sub>k</sub> = 0 volts for min illumination)                                                                                 |              |                      |                     |                      |                      |                           |            |                             |                     |                      |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                    | —            | 3.0                  | 1.2                 | —                    | 62,000               | 1,050                     | 65         | —                           | —                   | 6T7-G                |
| Class A Amplifier                       | 250<br>100                                                                                                                                                                                                                             | —            | 3.0<br>1.0           | 1.0<br>0.8          | —                    | 58,000<br>54,000     | 1,200<br>1,300            | 70<br>70   | —                           | —                   | 6T8                  |
| TV Dampener Service                     | Max d-c output current = 180 ma; max peak inverse voltage = 4,000 volts; max peak current = 400 ma                                                                                                                                     |              |                      |                     |                      |                      |                           |            |                             |                     |                      |
| Half-Wave Rectifier TV Dampener Service | Max d-c output current = 125 ma; max peak inverse voltage = 1250 volts, rms supply voltage = 350 volts; max peak current = 600 ma<br>Max d-c output current = 125 ma; max peak inverse voltage = 3850 volts; max peak current = 600 ma |              |                      |                     |                      |                      |                           |            |                             |                     | 6U4-GT               |
| Tuning Indicator                        | Plate voltage = 250 thru 1 meg. target voltage = 250 (E <sub>k</sub> = -22 volts, shadow = 0°) (E <sub>k</sub> = 0 volt, shadow = 90°, plate current = 0.24 ma, target current = 4 ma)                                                 |              |                      |                     |                      |                      |                           |            |                             |                     | 6U5                  |
| Class A Amplifier                       | 200                                                                                                                                                                                                                                    | 135          | 14.0                 | 65 $\dagger$        | 3.0 $\dagger$        | 20,000               | 6,200                     | —          | 3,000                       | 5.5                 | 6U6-GT               |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                    | 100          | 3.0                  | 8.2                 | 2.0                  | 800,000              | 1,600                     | —          | —                           | —                   | 6U7-G                |

‡ 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.

③ 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.

\* Section 1.

† Section 2.

‡ A resistor of 3 ohms must be put in series with heater.