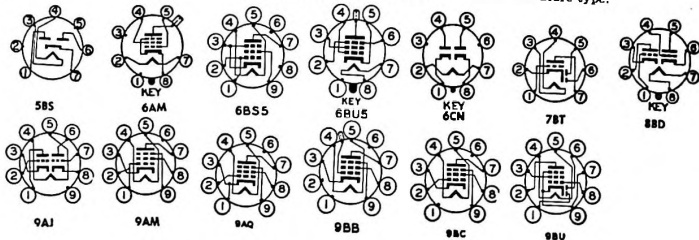


| Tube Type                                          | Classification by Construction       | Base Connections | Out-line Dwg                      | Type Cathode | Filament Volts | Filament Amp | Max Plate Volts                            | Max Screen Volts | Capacitance in Micromicrofarads |              |              |
|----------------------------------------------------|--------------------------------------|------------------|-----------------------------------|--------------|----------------|--------------|--------------------------------------------|------------------|---------------------------------|--------------|--------------|
|                                                    |                                      |                  |                                   |              |                |              |                                            |                  | Input                           | Output       | Grid-plate   |
| <b>6BQ6-G</b><br><b>6BQ6-GA</b><br><b>6BQ6-GTA</b> | Beam Power Amplifier                 | 6AM              | 12-8<br>T-X<br>9-49<br>or<br>9-50 | Htr          | 6.3            | 1.2          | 600                                        | 175              | —                               | —            | —            |
| <b>6BQ6-GT</b>                                     | Beam Power Amplifier                 | 6AM              | 9-49<br>or<br>9-50                | Htr          | 6.3            | 1.2          | 550                                        | 175              | 15▲                             | 7.5▲         | 0.6▲         |
| <b>6BQ7</b><br><b>6BQ7-A</b>                       | High-Frequency Twin Triode           | 9AJ              | 6-2                               | Htr          | 6.3            | 0.4          | 250                                        | —                | 2.85                            | 1.35         | 1.15         |
| <b>6BR7</b>                                        | Sharp-Cutoff RF Pentode              | 9BC              | 6-2                               | Htr          | 6.3            | 0.15         | 300                                        | 125              | 4.25▲                           | 4.0▲         | 0.01▲        |
| <b>6BS6</b>                                        | Beam Power Amplifier                 | 6BS5             | 6-3                               | Htr          | 6.3            | 0.75         | 250                                        | 250              | 9.5▲                            | 4.5▲         | 0.3▲         |
| <b>6BS7</b>                                        | Sharp-Cutoff RF Pentode              | 9BB              | 6-6                               | Htr          | 6.3            | 0.15         | 300                                        | 125              | 4.0▲                            | 4.0▲         | 0.01▲        |
| <b>6BT8</b>                                        | Duplex-Diode, High-Mu Triode         | 7BT              | 5-3                               | Htr          | 6.3            | 0.3          | 300                                        | —                | —                               | —            | —            |
| <b>6BU5</b>                                        | Sharp-Cutoff Beam Pentode            | 6BU5             | T-X                               | Htr          | 6.3            | 0.15         | 20,000                                     | 100              | 3.0▲                            | 0.9▲         | 0.024▲       |
| <b>6BU8</b>                                        | Duplex-Diode Medium-Mu Triode        | 7BT              | 5-3                               | Htr          | 6.3            | 0.3          | 300                                        | —                | —                               | —            | —            |
| <b>6BV7</b>                                        | Duplex-Diode Power Amplifier Pentode | 9BU              | 6-3                               | Htr          | 6.3            | 0.6          | 250                                        | 250              | 11.5▲                           | 9.5▲         | 0.5▲         |
| <b>6BW8</b>                                        | Beam Power Amplifier                 | 9AM              | 6-3                               | Htr          | 6.3            | 0.45         | 315                                        | 285              | —                               | —            | —            |
| <b>6BW7</b>                                        | Sharp-Cutoff RF Pentode              | 9AQ              | 6-2                               | Htr          | 6.3            | 0.3          | 275                                        | 275              | 10▲                             | 3.5▲         | 0.01▲        |
| <b>6BX4</b>                                        | Full-Wave High-Vacuum Rectifier      | 5BS              | 5-3                               | Htr          | 6.3            | 0.6          | —                                          | —                | —                               | —            | —            |
| <b>6BX6</b>                                        | RF Pentode                           | 9AQ              | 6-3                               | Htr          | 6.3            | 0.3          | 250                                        | 250              | —                               | —            | —            |
| <b>6BX7-GT</b>                                     | Medium-Mu Twin Triode                | 8BD              | 9-41                              | Htr          | 6.3            | 1.5          | 500                                        | —                | 1.4▲<br>1.8▲                    | 1.1▲<br>1.2▲ | 4.2▲<br>4.0▲ |
| <b>6BY5-G</b>                                      | Full-Wave High-Vacuum Rectifier      | 6CN              | 14-3                              | Htr          | 6.3            | 1.6          | Tube Voltage Drop: ▲<br>32 v at 175 ma d-c |                  |                                 |              |              |
| <b>6BY5-GA</b>                                     | Full-Wave High-Vacuum Rectifier      | 6CN              | T-X                               | Htr          | 6.3            | 1.6          | Tube Voltage Drop: ▲<br>32 v at 175 ma d-c |                  |                                 |              |              |

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> μmhos | μ Factor | Load for Rated Output, Ohms | Power Output, Watts | Tube Type                                          |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|---------------------|----------------------|---------------------|----------------------|----------|-----------------------------|---------------------|----------------------------------------------------|
|                                         |                                                                                                                                                                                                                                                                    |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Horizontal Triode Amplifier             | 250<br>60                                                                                                                                                                                                                                                          | 150<br>150   | 22.5<br>0            | 55<br>225           | 2.1<br>25            | 20,000              | 5,500                | —        | —                           | —                   | <b>6BQ6-G</b><br><b>6BQ6-GA</b><br><b>6BQ6-GTA</b> |
|                                         | Max positive pulse plate voltage; ⑤ = 9000 volts; max plate dissipation = 11 watts; max screen dissipation = 2.5 watts; max d-c cathode current = 110 ma                                                                                                           |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Horizontal Deflection Amplifier         | 250                                                                                                                                                                                                                                                                | 150          | 22.5                 | 55                  | 2.1                  | 20,000              | 5,550                | —        | —                           | —                   | <b>6BQ6-GT</b>                                     |
|                                         | Max positive pulse plate voltage; ⑤ = 5500 volts; max plate dissipation = 11 watts; max screen dissipation = 2.5 watts; max d-c cathode current = 110 ma                                                                                                           |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Class A Amplifier                       | 150                                                                                                                                                                                                                                                                | —            | R <sub>k</sub> = 220 | 9                   | —                    | 5,800               | 6,000                | 35       | —                           | —                   | <b>6BQ7</b><br><b>6BQ7-A</b>                       |
|                                         | 6,100 6,400 39                                                                                                                                                                                                                                                     |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | 100          | 3.0                  | 2.1                 | 0.6                  | 2,500,000           | 1,250                | —        | —                           | —                   | <b>6BR7</b>                                        |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | 250          | 7.5                  | 50†                 | 6.0†                 | 17,000              | 7,000                | —        | 5,000                       | 4.5                 | <b>6BS6</b>                                        |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | 100          | 3.0                  | 2.1                 | 0.6                  | 2,400,000           | 1,250                | —        | —                           | —                   | <b>6BS7</b>                                        |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | 100          | 3.0                  | 1.0                 | 0.8                  | 58,000              | 1,200                | 70       | —                           | —                   | <b>6BT8</b>                                        |
|                                         | 100 — 1.0 54,000 1,300 70                                                                                                                                                                                                                                          |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| High-Voltage Shunt Regulator            | 20,000                                                                                                                                                                                                                                                             | 70           | 2.4                  | 1.0                 | 0.5                  | —                   | —                    | —        | —                           | —                   | <b>6BU5</b>                                        |
|                                         | Max plate dissipation = 20 watts; max screen dissipation = 0.1 watt; max d-c cathode current = 2.5 ma                                                                                                                                                              |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | —            | 9.0                  | 9.5                 | —                    | 8,500               | 1,900                | 16       | 10,000                      | 0.30                | <b>6BU8</b>                                        |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | 250          | 5.0                  | 38†                 | 6.0†                 | 100,000             | 10,000               | —        | 8,000                       | 4.0                 | <b>6BV7</b>                                        |
| Class A Amplifier                       | 315                                                                                                                                                                                                                                                                | 225          | 13.0                 | 34†                 | 2.2†                 | 77,000              | 3,750                | —        | 8,500                       | 5.5                 | <b>6BW8</b>                                        |
|                                         | 250 150 12.5 45† 4.5† 52,000 4,100 5,000                                                                                                                                                                                                                           |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
|                                         | 180 180 8.5 29† 3† 58,000 3,700 5,500 2.0                                                                                                                                                                                                                          |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Class A Amplifier                       | 250                                                                                                                                                                                                                                                                | 250          | R <sub>k</sub> = 180 | 10                  | 3†                   | 750,000             | 8,200                | —        | —                           | —                   | <b>6BW7</b>                                        |
| Full-Wave Rectifier                     | Max d-c output current = 90 ma; max peak inverse voltage = 1350 volts; rms supply voltage per plate = 350 volts; max peak current per plate = 270 ma.                                                                                                              |              |                      |                     |                      |                     |                      |          |                             |                     | <b>6BX4</b>                                        |
| Class A Amplifier                       | 170                                                                                                                                                                                                                                                                | 170          | 2.0                  | 10                  | 2.5                  | 400,000             | 7,200                | —        | —                           | —                   | <b>6BX6</b>                                        |
| Vertical Deflection Amplifier           | 250                                                                                                                                                                                                                                                                | —            | R <sub>k</sub> = 390 | 42                  | —                    | 1,300               | 7,600                | 10       | —                           | —                   | <b>6BX7-GT</b>                                     |
|                                         | 100 — 0 80                                                                                                                                                                                                                                                         |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
|                                         | Max positive pulse plate voltage; ⑤ = 2000 volts; max plate dissipation = 10 watts; max plate dissipation ⑤ = 12 watts; max d-c cathode current = 60 ma                                                                                                            |              |                      |                     |                      |                     |                      |          |                             |                     |                                                    |
| Full-Wave Rectifier TV Damp-er Services | Max d-c output current = 175 ma; max peak inverse voltage = 1400 volts; rms supply voltage per plate = 375 volts; max peak current per plate = 525 ma; Max d-c output current = 175 ma; max peak inverse voltage = 3000 volts; max peak current per plate = 525 ma |              |                      |                     |                      |                     |                      |          |                             |                     | <b>6BY5-G</b>                                      |
| Full-Wave Rectifier TV Damp-er Services | Max d-c output current = 175 ma; max peak inverse voltage ⑤ = 1400 volts; max peak current per plate = 525 ma; Max d-c output current = 175 ma; max peak inverse voltage ⑤ = 3000 volts; max peak current per plate = 525 ma                                       |              |                      |                     |                      |                     |                      |          |                             |                     | <b>6BY5-GA</b>                                     |

‡ 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.

⑤ 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.