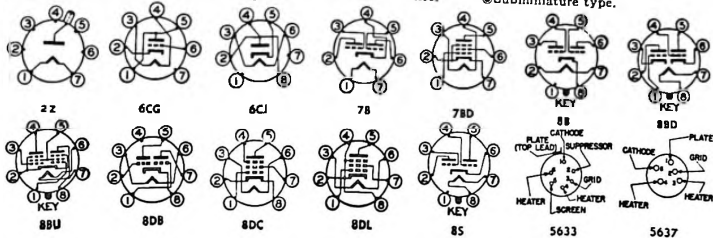


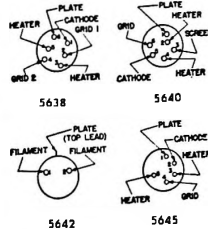
| Tube Type | Classification by Construction                 | Base Connections | Out-line Dwg | Type Cathode | Filament Volts | Filament Amp | Max Plate Volts                       | Max Screen Volts | Capacitance in Micromicrofarads |         |            |
|-----------|------------------------------------------------|------------------|--------------|--------------|----------------|--------------|---------------------------------------|------------------|---------------------------------|---------|------------|
|           |                                                |                  |              |              |                |              |                                       |                  | Input                           | Out-put | Grid-plate |
| 1633      | Medium-Mu Twin Triode                          | 8BD              | 9-11         | Htr          | 25.0           | 0.15         | 300                                   | —                | —                               | —       | —          |
| 1634      | High-Mu Twin Triode (Special 12SC7)            | 8S               | 8-1          | Htr          | 12.6           | 0.15         | 250                                   | —                | —                               | —       | —          |
| 1635      | Twin-Triode Power Amplifier                    | 8B               | 9-11         | Htr          | 6.3            | 0.6          | 300                                   | —                | Both sections in push-pull      |         |            |
| 1644      | Twin-Pentode Power Amplifier (Special 12L8-GT) | 8BU              | 9-11         | Htr          | 12.6           | 0.15         | 180                                   | 180              | 5.0▲                            | 6.0▲    | 0.7▲       |
| 1664      | Half-Wave High-Vacuum Rectifier                | 2Z               | T-X          | Fil          | 1.4            | 0.05         | —                                     | —                | —                               | —       | —          |
| 6690      | RP Pentode                                     | 7BD              | 5-1          | Htr          | 6.3            | 0.15         | 180                                   | 140              | 3.40                            | 2.90    | 0.01       |
| 6691      | Sharp-Cutoff RF Pentode (Special 6AK5)         | 7BD              | 5-1          | Htr          | 6.3            | 0.15         | 180                                   | 140              | 4.0                             | 2.8     | 0.02♣      |
| 5608-A    | Medium-Mu Twin-Triode                          | 7B               | 14-1         | Htr          | 2.5            | 2.0          | 350                                   | —                | —                               | —       | —          |
| 6610      | Medium-Mu Triode                               | 6CG              | 5-2          | Htr          | 6.3            | 0.15         | 300                                   | —                | —                               | —       | —          |
| 5633⊙     | Remote-Cutoff RP Pentode                       | 5633             | T-X          | Htr          | 6.3            | 0.15         | 150                                   | 140              | 4.0▲                            | 2.2▲    | 0.015▲♣    |
| 5634⊙     | Remote-Cutoff RP Pentode                       | 5633             | T-X          | Htr          | 6.3            | 0.15         | 150                                   | 140              | 4.4▲                            | 2.2▲    | 0.015▲♣    |
| 5635⊙     | Medium-Mu Twin Triode                          | 8DB              | 3-1          | Htr          | 6.3            | 0.45         | 150                                   | —                | 2.6                             | 1.6     | 1.2        |
| 5636⊙     | Dual-Control Pentode                           | 8DC              | 3-1          | Htr          | 6.3            | 0.15         | 165⊞                                  | 155⊞             | —                               | —       | —          |
| 5637⊙     | High-Mu Triode                                 | 5637             | 3-2          | Htr          | 6.3            | 0.15         | 150                                   | —                | 2.6▲                            | 0.7▲    | 1.4▲       |
| 5638⊙     | Amplifier Pentode                              | 5638             | 3-2          | Htr          | 6.3            | 0.15         | 150                                   | 140              | 4.0                             | 0.5     | 0.19       |
| 5639⊙     | Video Pentode                                  | 8DL              | 3-3          | Htr          | 6.3            | 0.45         | 165⊞                                  | 155⊞             | 9.5                             | 7.5     | 0.10♣      |
| 5640⊙     | Beam Power Amplifier                           | 5640             | 3-4          | Htr          | 6.3            | 0.45         | 150                                   | 140              | 9.0                             | 7.0     | 0.18       |
| 5641⊙     | Half-Wave Rectifier                            | 6CJ              | 3-3          | Htr          | 6.3            | 0.45         | Tube Voltage Drop: 23 v at 90 ma d-c  |                  |                                 |         |            |
| 5642⊙     | Half-Wave High-Voltage Rectifier               | 5642             | T-X          | Fil          | 1.25           | 0.2          | Tube Voltage Drop: 30 v at 4.0 ma d-c |                  |                                 |         |            |
| 5645⊙     | Medium-Mu Triode                               | 5645             | T-X          | Htr          | 6.3            | 0.15         | 150                                   | —                | 2.2                             | 3.0     | 1.7        |

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

⊙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 Out-put, Ohms | Power Out-put, Watts | Tube Type |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------|---------------------|----------------------|-----------------------|------------------------|--------------------------------|------------------------------|----------------------|-----------|
| Class A Amplifier ♦   | 250                                                                                                                                             | —            | 8                      | 11.5                | —                    | 6,900                 | 2,600                  | 18                             | —                            | —                    | 1633      |
| Class A Amplifier ♦   | 250                                                                                                                                             | —            | 2                      | 2.0                 | —                    | 53,000§               | 1,325                  | 70                             | —                            | —                    | 1634      |
| Class B Amplifier     | 300                                                                                                                                             | —            | 0                      | 6.6†                | —                    | —                     | —                      | —                              | 12,000‡                      | 10.4                 | 1635      |
| Class A Amplifier ♦   | 180                                                                                                                                             | 180          | 9                      | 13†                 | 2.8†                 | 160,000               | 2,150                  | —                              | 10,000                       | 1.0                  | 1644      |
| Half-Wave Rectifier   | Max d-c output current = 1.0 ma; max peak inverse voltage = 4,300 volts; rms supply voltage = 1,500 volts; max peak current = 6 ma              |              |                        |                     |                      |                       |                        |                                |                              |                      | 1664      |
| Class A Amplifier     | 90                                                                                                                                              | 90           | R <sub>k</sub> = 820   | 3.9                 | 1.4                  | 300,000               | 2,000                  | —                              | —                            | —                    | 6690      |
| Class A Amplifier     | 180                                                                                                                                             | 120          | R <sub>k</sub> = 180   | 7.7                 | 2.4                  | 500,000§              | 5,100                  | —                              | —                            | —                    | 6691      |
|                       | 120                                                                                                                                             | 120          | R <sub>k</sub> = 180   | 7.5                 | 2.5                  | 300,000§              | 5,000                  | —                              | —                            | —                    |           |
| Class A Amplifier ♦   | 300                                                                                                                                             | —            | 6.0                    | 6.0                 | —                    | 13,000                | 2,450                  | 32                             | —                            | —                    | 5608-A    |
| Class A Amplifier     | 90                                                                                                                                              | —            | 1.5                    | 17                  | —                    | 3,500                 | 4,000                  | 14                             | —                            | —                    | 6610      |
| Class A Amplifier     | 100                                                                                                                                             | 100          | R <sub>k</sub> = 150   | 7.0                 | 2.8                  | 200,000               | 3,400                  | —                              | —                            | —                    | 5633 ⊙    |
| Class A Amplifier     | 100                                                                                                                                             | 100          | R <sub>k</sub> = 150   | 6.5                 | 2.5                  | 240,000§              | 3,500                  | —                              | —                            | —                    | 5634 ⊙    |
| Class A Amplifier ♦   | 100                                                                                                                                             | —            | R <sub>k</sub> = 100 ⊞ | 4.8                 | —                    | 10,000                | 3,800                  | 38                             | —                            | —                    | 5635 ⊙    |
| Gated Amplifier       | 100                                                                                                                                             | 100          | R <sub>k</sub> = 150   | 5.3                 | 3.6                  | 110,000§              | 3,200                  | G <sub>2</sub> tied to cathode |                              | —                    | 5636 ⊙    |
|                       | 100                                                                                                                                             | 100          | R <sub>k</sub> = 150   | 4.0                 | 5.8                  | 50,000§               | 1,950                  | E <sub>cc</sub> = -1.0 volts   |                              |                      |           |
| Class A Amplifier     | 100                                                                                                                                             | —            | R <sub>k</sub> = 820   | 1.4                 | —                    | 26,000                | 2,700                  | 70                             | —                            | —                    | 5637 ⊙    |
| Class A Amplifier     | 100                                                                                                                                             | 100          | R <sub>k</sub> = 270   | 4.8                 | 1.25                 | 150,000               | 3,300                  | —                              | —                            | —                    | 5638 ⊙    |
| Class A Amplifier     | 150                                                                                                                                             | 100          | R <sub>k</sub> = 100   | 21                  | 4.0                  | 50,000                | 9,000                  | —                              | —                            | —                    | 5639 ⊙    |
| Class A Amplifier     | 100                                                                                                                                             | 100          | 9.0                    | 31†                 | 2.2†                 | 15,000                | 5,000                  | —                              | 3,000                        | 1.25                 | 5640 ⊙    |
| Half-Wave Rectifier   | Max d-c output current ⊞ = 50 ma; max peak inverse voltage ⊞ = 930 volts; rms supply voltage per plate = 275 volts; max peak current ⊞ = 300 ma |              |                        |                     |                      |                       |                        |                                |                              |                      | 5641 ⊙    |
| TV Flyback Rectifiers | Max d-c output current = 0.25 ma; max peak inverse voltage = 10,000 volts; max peak current = 5.0 ma                                            |              |                        |                     |                      |                       |                        |                                |                              |                      | 5642 ⊙    |
| Class A Amplifier     | 100                                                                                                                                             | —            | R <sub>k</sub> = 560   | 5.0                 | —                    | 7,400                 | 2,700                  | 20                             | —                            | —                    | 5645 ⊙    |



♠ Per section.  
 § Approximate.  
 † Zero Signal.  
 ‡ Plate-to-plate.  
 ▲ Without external shield.  
 ♣ Maximum.  
 ⊞ For both sections.  
 ⊞ Absolute maximum rating.  
 — The duration of the pulse voltage must not exceed 15 percent of one scanning cycle.