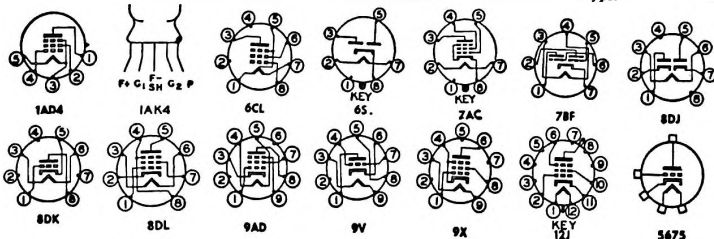


| Tube Type | Classification by Construction        | Base Connections | Out-line Dwg | Type Cathode | Filament Volts | Filament Amp | Max Plate Volts                       | Max Screen Volts | Capacitance in Micromicrofarads                                                                                                     |          |            |
|-----------|---------------------------------------|------------------|--------------|--------------|----------------|--------------|---------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------|------------|
|           |                                       |                  |              |              |                |              |                                       |                  | Input                                                                                                                               | Out-put  | Grid-plate |
| 5839      | Full-Wave High-Vacuum Rectifier       | 6S               | T-X          | Htr          | 26.5           | 0.285        | —                                     | —                | —                                                                                                                                   | —        | —          |
| 5840      | Sharp-Cutoff RF Pentode               | 8DL              | 3-1          | Htr          | 6.3            | 0.15         | 165                                   | 155              | 4.2                                                                                                                                 | 3.4      | 0.015      |
| 5842      | High-Mu Triode                        | 9V               | 6-1          | Htr          | 6.3            | 0.3          | 180                                   | —                | —                                                                                                                                   | —        | —          |
| 5844      | Medium-Mu Twin Triode                 | 7BP              | 5-2          | Htr          | 6.3            | 0.3          | 175                                   | —                | 2.4                                                                                                                                 | 0.5, 0.4 | 2.7        |
| 5847      | Sharp-Cutoff RF Pentode               | 9X               | 6-1          | Htr          | 6.3            | 0.3          | 180                                   | 150              | 7.1                                                                                                                                 | 2.9      | 0.04       |
| 5851      | Beam Power Amplifier                  | 6CL              | T-X          | Fil          | 1.25 DC        | 0.11 (0.055) | 180                                   | 135              | 2.5                                                                                                                                 | 3.0      | 0.055      |
| 5852      | Full-Wave High-Vacuum Rectifier       | 6S               | T-X          | Htr          | 6.3            | 1.2          | —                                     | —                | —                                                                                                                                   | —        | —          |
| 5854      | Power Amplifier Pentode               | 1AK4             | 2-1          | Fil          | 1.25           | 0.03         | 50                                    | 50               | —                                                                                                                                   | —        | —          |
| 5871      | Beam Power Amplifier (Special 6V6-GT) | 7AC              | 9-11         | Htr          | 6.3            | 0.45         | 315                                   | 285              | 9.5                                                                                                                                 | 7.5      | 0.7        |
| 5873      | Medium-Mu Twin Triode                 | 5873             | 3-2          | Htr          | 6.3            | 0.3          | 300                                   | —                | —                                                                                                                                   | —        | —          |
| 5875      | Sharp-Cutoff Pentode                  | 1AD4             | 2-1          | Fil          | 1.25 DC        | 0.1          | 90                                    | 90               | 4.0                                                                                                                                 | 4.0      | 0.03       |
| 5876      | High-Mu Triode (Pencil)               | 5875             | T-X          | Htr          | 6.3            | 0.135        | 300                                   | —                | 2.5                                                                                                                                 | 0.035    | 1.4        |
| 5879      | Sharp-Cutoff AF Pentode               | 9AD              | 6-2          | Htr          | 6.3            | 0.15         | 300                                   | 150              | Pentode Connection                                                                                                                  |          |            |
| 5881      | Beam Power Amplifier (Special 6L6-G)  | 7AC              | T-X          | Htr          | 6.3            | 0.9          | 360                                   | 270              | Triode Connection (G <sub>1</sub> , G <sub>2</sub> & P Tied)                                                                        |          |            |
| 5890      | Remote-Cutoff Pentode Regulator       | 12J              | T-X          | Htr          | 6.3            | 0.6          | 30,000                                | 450              | Single Tube<br>Two tubes, Push-pull<br>E <sub>b</sub> = 5,500 volts<br>E <sub>c</sub> = 5,500 volts<br>E <sub>d</sub> = 5,500 volts |          |            |
| 5896      | High-Frequency Twin Diode             | 8DJ              | 3-1          | Htr          | 6.3            | 0.3          | Tube Voltage Drop: 4.5 v at 18 ma d-c |                  |                                                                                                                                     |          |            |
| 5897      | Medium-Mu Triode                      | 8DK              | 3-1          | Htr          | 6.3            | 0.15         | 165                                   | —                | 2.2                                                                                                                                 | 0.7      | 1.40       |
| 5898      | High-Mu Triode                        | 8DK              | 3-1          | Htr          | 6.3            | 0.15         | 165                                   | —                | 2.40                                                                                                                                | 0.60     | 0.70       |
| 5899      | Semi-Remote-Cutoff RF Pentode         | 8DL              | 3-1          | Htr          | 6.3            | 0.15         | 165                                   | 155              | 4.2                                                                                                                                 | 3.4      | 0.015      |

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

Subminiature type.



| Service             | Plate Volts                                                                                                                                                  | Screen Volts | Neg Grid Volts       | Plate Milli-am-peres | Screen Milli-am-peres | R <sub>p</sub> Ohms          | G <sub>m</sub> μmhos | # Fac-tor | Load for Rated Out-put, Ohms          | Power Out-put, Watts | Tube Type |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|----------------------|-----------------------|------------------------------|----------------------|-----------|---------------------------------------|----------------------|-----------|
| Full-Wave Rectifier | Max d-c output current = 65 ma; max peak inverse voltage = 1,375 volts; rms supply voltage per plate = 300 volts; max peak current per plate = 270 ma        |              |                      |                      |                       |                              |                      |           |                                       |                      | 5839      |
| Class A Amplifier   | 100                                                                                                                                                          | 100          | R <sub>k</sub> = 150 | 7.5                  | 2.4                   | 260,000                      | 5,000                | —         | —                                     | —                    | 5840      |
| Class A Amplifier   | 150                                                                                                                                                          | —            | R <sub>k</sub> = 62  | 26                   | —                     | 1,800                        | 24,000               | 43        | —                                     | —                    | 5842      |
| Class A Amplifier   | 100                                                                                                                                                          | —            | R <sub>k</sub> = 470 | 4.8                  | —                     | 7,950                        | 3,400                | 27        | —                                     | —                    | 5844      |
| Class A Amplifier   | 150                                                                                                                                                          | —            | 0                    | 4.8                  | —                     | R <sub>p</sub> = 47,000 ohms | 30,000               | —         | —                                     | —                    | 5847      |
| Class A Amplifier   | 150                                                                                                                                                          | 150          | R <sub>k</sub> = 110 | 13                   | 4.5                   | —                            | 12,500               | —         | —                                     | —                    | 5851      |
| Class A Amplifier   | 125                                                                                                                                                          | 125          | 7.5                  | 5.5                  | 0.9                   | 175,000                      | 1,600                | —         | —                                     | —                    | 5852      |
| Full-Wave Rectifier | Max d-c output current = 65 ma; max peak inverse voltage = 1,375 volts; rms supply voltage per plate = 300 volts; max peak current per plate = 270 ma        |              |                      |                      |                       |                              |                      |           |                                       |                      | 5854      |
| Class A Amplifier   | 45                                                                                                                                                           | 45           | 2.0                  | 0.8                  | 0.25                  | 350,000                      | 550                  | —         | 50,000                                | 0.0095               | 5871      |
| Class A Amplifier   | 315                                                                                                                                                          | 225          | 13                   | 34                   | 2.2                   | 77,000                       | 3,750                | —         | 8,500                                 | 5.5                  | 5873      |
| Class A Amplifier   | 150                                                                                                                                                          | —            | 3.0                  | 9.0                  | —                     | —                            | 2,900                | 22        | —                                     | —                    | 5875      |
| Class A Amplifier   | 90                                                                                                                                                           | 90           | 0                    | 3.5                  | 1.0                   | —                            | 2,500                | —         | —                                     | —                    | 5876      |
| Class A Amplifier   | 250                                                                                                                                                          | —            | R <sub>k</sub> = 75  | 18                   | —                     | 8,625                        | 6,500                | 56        | —                                     | —                    | 5879      |
| Class A Amplifier   | 250                                                                                                                                                          | 100          | 3.0                  | 1.8                  | 0.4                   | 2,000,000                    | 1,000                | —         | —                                     | —                    | 5881      |
| Class A Amplifier   | 250                                                                                                                                                          | —            | 8.0                  | 5.5                  | —                     | 13,700                       | 1,530                | 21        | —                                     | —                    | 5890      |
| Class A Amplifier   | 350                                                                                                                                                          | 250          | 18                   | 53                   | 2.5                   | 48,000                       | 5,200                | —         | 4,200                                 | 11.3                 | 5896      |
| Class A Amplifier   | 250                                                                                                                                                          | 250          | 14                   | 75                   | 4.3                   | 30,000                       | 6,100                | —         | 2,500                                 | 6.7                  | 5897      |
| Class A Amplifier   | 360                                                                                                                                                          | 270          | 22.5                 | 88                   | 5.0                   | —                            | —                    | —         | 3,300                                 | 18                   | 5898      |
| Class A Amplifier   | 360                                                                                                                                                          | 270          | 22.5                 | 88                   | 5.0                   | —                            | —                    | —         | 6,600                                 | 26.5                 | 5899      |
| Shunt Regulator     | 30,000                                                                                                                                                       | 200          | 60                   | 0                    | 0                     | —                            | —                    | —         | Peak G <sub>1</sub> signal = 0 volts  | —                    | 5896      |
|                     | 30,000                                                                                                                                                       | 200          | 60                   | 0.06                 | 0                     | —                            | —                    | —         | Peak G <sub>1</sub> signal = 20 volts | —                    | 5897      |
|                     | 30,000                                                                                                                                                       | 200          | 60                   | 0.50                 | 0                     | —                            | —                    | —         | Peak G <sub>1</sub> signal = 45 volts | —                    | 5898      |
| Full-Wave Rectifier | Max d-c output current per plate = 10 ma; max peak inverse voltage = 400 volts; rms supply voltage per plate = 150 volts; max peak current per plate = 60 ma |              |                      |                      |                       |                              |                      |           |                                       |                      | 5899      |
| Class A Amplifier   | 100                                                                                                                                                          | —            | R <sub>k</sub> = 150 | 8.5                  | —                     | —                            | 5,800                | 27        | —                                     | —                    | 5897      |
| Class A Amplifier   | 150                                                                                                                                                          | —            | —                    | 20                   | —                     | —                            | Frequency = 500 mc   | —         | —                                     | —                    | 5898      |
| Class A Amplifier   | 160                                                                                                                                                          | —            | R <sub>k</sub> = 680 | 1.7                  | —                     | —                            | 2,700                | 70        | —                                     | —                    | 5899      |
| Class A Amplifier   | 100                                                                                                                                                          | 100          | R <sub>k</sub> = 120 | 7.2                  | 2.0                   | 260,000                      | 4,500                | —         | —                                     | —                    | 5899      |

† 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.

q 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.