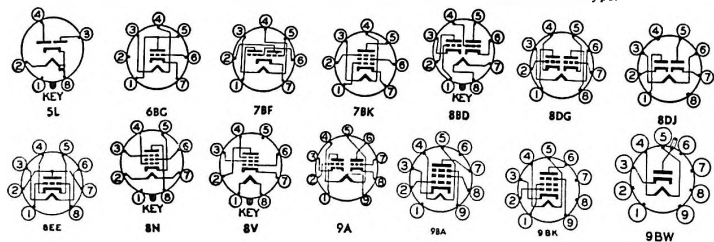


| Tube Type            | Classification by Construction          | Base Connections | Out-line Dwg | Type Cath-ode | Filament Volts | Filament Amp | Max Plate Volts                                       | Max Screen Volts | Capacitance in Micromicrofarads              |                                                |                                              |
|----------------------|-----------------------------------------|------------------|--------------|---------------|----------------|--------------|-------------------------------------------------------|------------------|----------------------------------------------|------------------------------------------------|----------------------------------------------|
|                      |                                         |                  |              |               |                |              |                                                       |                  | Input                                        | Out-put                                        | Grid-plate                                   |
| <b>6086</b>          | Pentode                                 | 9BK              | 6-3          | Htr           | 18.0           | 0.1          | 210                                                   | 210              | 8.8                                          | 3.6                                            | 0.015                                        |
| <b>6087</b>          | Full-Wave High-Vacuum Rectifier         | 5L               | 9-41         | Htr           | 5.0            | 2.0          | Tube Voltage Drop: $\blacklozenge$ 50 v at 125 ma d-c |                  |                                              |                                                |                                              |
| <b>6088</b> $\oplus$ | Power Amplifier Pentode                 | 512-AX           | 2-1          | Fil           | 1.25 DC        | 0.02         | 67.5 $\boxplus$                                       | 67.5 $\boxplus$  | —                                            | —                                              | —                                            |
| <b>6101</b>          | Medium-Mu Twin Triode (Special 6J6)     | 7BF              | 5-2          | Htr           | 6.3            | 0.45         | 330 $\boxplus$                                        | —                | 2.0 $\blacktriangle$                         | 0.4 $\blacktriangle$                           | 1.5 $\blacktriangle$                         |
| <b>6110</b> $\oplus$ | Twin Diode                              | 8DJ              | 3-1          | Htr           | 6.3            | 0.15         | Tube Voltage Drop: $\blacklozenge$ 10 v at 15 ma d-c  |                  |                                              |                                                |                                              |
| <b>6111</b> $\oplus$ | Medium-Mu Twin Triode                   | 8DG              | 3-1          | Htr           | 6.3            | 0.3          | 165 $\boxplus$                                        | —                | 2.1                                          | 1.3 $\blacktriangle$<br>1.4 $\blacktriangle$   | 1.4                                          |
| <b>6112</b> $\oplus$ | High-Mu Twin Triode                     | 8DG              | 3-1          | Htr           | 6.3            | 0.3          | 165 $\boxplus$                                        | —                | 1.9                                          | 1.5                                            | 1.0                                          |
| <b>6113</b>          | High-Mu Twin Triode (Special 6SL7-GT)   | 8BD              | 9-11         | Htr           | 6.3            | 0.3          | 250                                                   | —                | 3.0                                          | 3.8                                            | 2.8                                          |
| <b>6132</b>          | RF Pentode (Special 6CH6)               | 9BA              | 6-3          | Htr           | 6.3            | 0.75         | 275                                                   | 275              | 14 $\blacktriangle$                          | 5.0 $\blacktriangle$                           | 0.25 $\blacklozenge$                         |
| <b>6134</b>          | Sharp-Cutoff RF Pentode (Special 6AC7)  | 8N               | 8-1          | Htr           | 6.3            | 0.45         | 300                                                   | 150              | 11                                           | 5.0                                            | 0.015 $\blacklozenge$                        |
| <b>6135</b>          | Medium-Mu Triode (Special 6C4)          | 6BG              | 5-2          | Htr           | 6.3            | 0.175        | 300                                                   | —                | 1.5 $\blacktriangle$                         | 0.7 $\blacktriangle$                           | 1.4 $\blacktriangle$                         |
| <b>6136</b>          | Sharp-Cutoff RF Pentode (Special 6AU6)  | 7BK              | 5-2          | Htr           | 6.3            | 0.3          | 300                                                   | 150              | 6.0 $\blacktriangle$                         | 5.0 $\blacktriangle$                           | 0.0075 $\blacklozenge$                       |
| <b>6137</b>          | Remote-Cutoff RF Pentode (Special 6SK7) | 8N               | 8-1          | Htr           | 6.3            | 0.3          | 300                                                   | 150              | 5.0                                          | 7.0                                            | 0.003 $\blacklozenge$                        |
| <b>6145</b>          | Sharp-Cutoff Pentode                    | 8V               | 9-31         | Htr           | 6.3            | 0.6          | 300                                                   | 150              | 14                                           | 7.5                                            | 0.06 $\blacklozenge$                         |
| <b>6167</b>          | Half-Wave High-Vacuum Rectifier         | 9BW              | 6-7          | Htr           | 6.3            | 0.8          | —                                                     | —                | —                                            | —                                              | —                                            |
| <b>6168</b>          | Medium-Mu Twin Triode                   | 9A               | 6-2          | Htr           | 12.6<br>6.3    | 0.31<br>0.6  | 300                                                   | —                | 2.3 $\blacktriangle$                         | 0.95 $\blacktriangle$<br>0.85 $\blacktriangle$ | 2.1 $\blacktriangle$                         |
| <b>6169</b> $\oplus$ | High-Frequency Triode                   | 8EE              | 3-1          | Htr           | 6.3            | 0.15         | 250                                                   | —                | 2.5                                          | 2.6                                            | 1.0                                          |
| <b>6173</b>          | UHF Diode (Pencil)                      | 6173             | T-X          | Htr           | 6.3            | 0.135        | —                                                     | —                | —                                            | —                                              | —                                            |
| <b>6180</b>          | Medium-Mu Twin Triode (Special 6SN7-GT) | 8BD              | 9-3          | Htr           | 6.3            | 0.6          | 300                                                   | —                | 2.3 $\blacktriangle$<br>2.0 $\blacktriangle$ | 2.5 $\blacktriangle$<br>2.2 $\blacktriangle$   | 3.5 $\blacktriangle$<br>3.2 $\blacktriangle$ |

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

⊕ Subminiature type.



| Service                           | Plate Volts                                                                                                                                                         | Screen Volts      | Ng Grid Volts                               | Plate Milli-amperes            | Screen Milli-amperes         | R <sub>p</sub> Ohms  | G <sub>m</sub> $\mu$ mhos | $\mu$ Fac-tor | Load for Rated Out-put, Ohms | Power Out-put, Watts | Tube Type            |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------|--------------------------------|------------------------------|----------------------|---------------------------|---------------|------------------------------|----------------------|----------------------|
| Class A Amplifier                 | 210                                                                                                                                                                 | 120               | R <sub>g</sub> = 165                        | 10                             | 2.1                          | 500,000              | 9,000                     | —             | —                            | —                    | <b>6086</b>          |
| Full-Wave Rectifier               | Max d-c output current = 125 ma; max peak inverse voltage = 1400 volts; rms supply voltage per plate = 350 volts; max peak current per plate = 375 ma               |                   |                                             |                                |                              |                      |                           |               |                              |                      | <b>6087</b>          |
| Class A Amplifier                 | 45                                                                                                                                                                  | 45                | 1.25                                        | 0.65 $\blacktriangle$          | 0.15 $\blacktriangle$        | 700,000              | 625                       | —             | 80,000                       | 0.0105               | <b>6088</b> $\oplus$ |
| Class A Amplifier $\blacklozenge$ | 100                                                                                                                                                                 | —                 | R <sub>g</sub> = 30 $\boxplus$              | 8.5                            | —                            | 6,300                | 6,000                     | 38            | —                            | —                    | <b>6101</b>          |
| Full-Wave Rectifier               | Max d-c output current per plate = 4.4 ma; max peak inverse voltage = 460 volts; max rms supply voltage per plate = 165 volts; max peak current per plate = 26.5 ma |                   |                                             |                                |                              |                      |                           |               |                              |                      | <b>6110</b> $\oplus$ |
| Class A Amplifier $\blacklozenge$ | 100                                                                                                                                                                 | —                 | R <sub>g</sub> = 220                        | 8.5                            | —                            | 4,000                | 5,000                     | 20            | —                            | —                    | <b>6111</b> $\oplus$ |
| Class A Amplifier $\blacklozenge$ | 150                                                                                                                                                                 | —                 | R <sub>g</sub> = 420                        | 1.75                           | —                            | 28,000               | 2,500                     | 70            | —                            | —                    | <b>6112</b> $\oplus$ |
|                                   | 100                                                                                                                                                                 | —                 | R <sub>g</sub> = 1,500                      | 0.8                            | —                            | 39,000               | 1,800                     | 70            | —                            | —                    |                      |
| Class A Amplifier $\blacklozenge$ | 250                                                                                                                                                                 | —                 | 2.0                                         | 2.3                            | —                            | 44,000               | 1,600                     | 70            | —                            | —                    | <b>6113</b>          |
| Class A Amplifier                 | 250                                                                                                                                                                 | 250               | 4.5                                         | 40                             | 6.0                          | 50,000               | 11,000                    | —             | —                            | —                    | <b>6132</b>          |
| Class A Amplifier                 | 300                                                                                                                                                                 | 150               | R <sub>g</sub> = 160                        | 10                             | 2.5                          | 1,000,000            | 9,000                     | —             | —                            | —                    | <b>6134</b>          |
| Class A Amplifier                 | 250                                                                                                                                                                 | 100               | 8.5                                         | 10.5                           | —                            | 7,700<br>6,250       | 2,200<br>3,100            | 17<br>19.5    | —                            | —                    | <b>6135</b>          |
| Class A Amplifier                 | 250                                                                                                                                                                 | 150               | R <sub>g</sub> = 68<br>R <sub>g</sub> = 150 | 10.6<br>5.0                    | 4.3<br>2.1                   | 1,000,000<br>500,000 | 5,200<br>3,900            | —             | —                            | —                    | <b>6136</b>          |
| Class A Amplifier                 | 250                                                                                                                                                                 | 100               | 3<br>1                                      | 9.2<br>13                      | 2.6<br>4.0                   | 800,000<br>120,000   | 2,000<br>2,350            | —             | —                            | —                    | <b>6137</b>          |
| Pulse Amplifier                   | 150<br>150<br>60                                                                                                                                                    | 100<br>100<br>100 | 0<br>5.3<br>0                               | 34<br>2.0 $\blacklozenge$<br>— | 8<br>—<br>12 $\blacklozenge$ | 100,000<br>—<br>—    | —<br>—<br>—               | —<br>—<br>—   | —<br>—<br>—                  | —<br>—<br>—          | <b>6145</b>          |
| Half-Wave Rectifier               | Max d-c output current = 125 ma; max peak inverse voltage = 1000 volts; rms supply voltage = 350 volts; max peak current = 450 ma                                   |                   |                                             |                                |                              |                      |                           |               |                              |                      | <b>6167</b>          |
| Class A Amplifier $\blacklozenge$ | 250                                                                                                                                                                 | —                 | 4.6                                         | 6.0                            | —                            | 14,000               | 2,300                     | 32            | —                            | —                    | <b>6168</b>          |
| Class A Amplifier                 | 180                                                                                                                                                                 | —                 | 1.0                                         | 11.5                           | —                            | 8,500                | 6,500                     | 55            | —                            | —                    | <b>6169</b> $\oplus$ |
| Half-Wave Rectifier               | Max d-c output current = 5.5 ma; max peak inverse voltage = 375 volts; max peak current = 50 ma                                                                     |                   |                                             |                                |                              |                      |                           |               |                              |                      | <b>6173</b>          |
| Class A Amplifier $\blacklozenge$ | 250                                                                                                                                                                 | 100               | —                                           | 9.0<br>0                       | 6.5<br>10.6                  | 9,100<br>8,000       | 2,200<br>2,500            | 20<br>20      | —<br>—                       | —<br>—               | <b>6180</b>          |



512-AX



6173

- † 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.  
 ‡ Heater warm-up time controlled for series-stringing 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.