

**POWER TUBES – TETRODES & PENTODES (Continued)**

| TYPE NO. | FILAMENT      |                | Mu<br>Grid #1<br>to<br>Grid #2 | Max.<br>Diss.<br>Watts | TYPICAL OPERATION |                    |                 |             |              |             |
|----------|---------------|----------------|--------------------------------|------------------------|-------------------|--------------------|-----------------|-------------|--------------|-------------|
|          |               |                |                                |                        | PLATE             |                    |                 | GRID        |              | SCREEN      |
|          | Volts         | Amps           |                                |                        | Volts<br>DC       | Amps<br>DC         | Output<br>Watts | Volts<br>DC | MA<br>DC     | Volts<br>DC |
| 6360     | 12.6          | 0.410          | 7.5                            | CCS=10<br>ICAS=14      | 300               | 0.100              | ICAS<br>18.5    | -45         | 3            | 200         |
| 6360 A   | 6.3           | 0.820          |                                |                        |                   |                    |                 |             |              |             |
| 6883     | 12.6          | 0.625          | 4.5                            | CCS=20<br>ICAS=25      | 600<br>750        | 0.112<br>0.120     | 52<br>70        | -58<br>-62  | 2.8<br>3.1   | 150<br>160  |
| 6907     | 12.6<br>6.3   | 0.65<br>1.3    | 8.5                            | CCS=20<br>ICAS=25      | 600<br>750        | 0.100<br>0.150     | 42<br>79        | -60<br>-60  | 1.4<br>2     | 250<br>250  |
| 6939     | 12.6<br>6.3   | 0.3<br>0.6     | 31                             | CCS=6<br>ICAS=7.5      | 180<br>200        | 2x.027<br>2x.030   | 5.8<br>7.2      | -20<br>-20  | 0.75<br>0.75 | 180<br>200  |
| 6979     | 6.0           | 2.6            | 5                              | 250                    | 2,000             | 0.250              | 410             | -90         | 12           | 250         |
| 7377     | 12.6<br>6.3   | 0.3<br>0.6     | 28                             | 8                      | 250               | 0.035              | 7               | -15         | 0.75         | 160         |
| 7580     | 6             | 2.6            | 4                              | 250                    | 2,000             | 0.250              | 360             | -250        | 50           | 400         |
| 7378     | 6.3           | 3.9            | 5.7                            | 100                    | 750               | 0.385              | 200             | -90         | 7<br>10      | 250         |
| 7527     | 5             | 14.1           | 5.1                            | 400                    | 4,000             | 0.270              | 800             | -170        | 9.5          | 500         |
| 7609     | 26.5          | 0.57           | 5                              | 250                    | 1,250             | 0.200              | 140             | -115        | 10           | 280         |
| 7645     | 6.3<br>12.6   | 0.6<br>0.3     | 31                             | CCS=5.5<br>ICAS=7      | 180               | 0.04               | 4.2             | -20         | .6           | 180         |
| 7854     | 12.6<br>6.3   | 0.9<br>1.8     | 8.2                            | 60                     | 1,000             | 0.200              | 134             | -85         | 5.4          | 250         |
| 7983     | 3.15          | 1.65           | 7.5                            | 7                      | 300               | 0.55               | 11              | -40         | 1.5          | 155         |
| 8042     | 1.6           | 3.2            | 4.5                            | 25                     | 650               | 0.160              | 65              | -71         | 2.8          | 180         |
| 8116     | 26.5<br>13.25 | 0.433<br>0.866 | 7                              | 2x30                   | 1,000             | 2x0.110<br>2x0.131 | 141<br>P.E.P.   | -34         | 0            | 250         |
| 8117     | 12.6<br>6.3   | 0.9<br>1.8     | 7                              | 2x30                   | 1,000             | 2x0.131            | 141<br>P.E.P.   | -34         | 0            | 250         |
| 8177     | 4             | 60             | 9                              | 1200                   | 3,110             | 0.8                | 1,280           | -300        | 10           | 610         |
| 8179     | 7.5           | 22.6           | 5.1                            | 800                    | 5,500             | 0.6                | 1,300           | -500        | 0            | 800         |

**POWER TUBES – TRIODES**

| TYPE NO. | FILAMENT |      | Mu | Max.<br>Diss.<br>Watts | TYPICAL OPERATION |            |                 |             |          | MAX.<br>FREQ.<br>mc |
|----------|----------|------|----|------------------------|-------------------|------------|-----------------|-------------|----------|---------------------|
|          |          |      |    |                        | PLATE             |            |                 | GRID        |          |                     |
|          | Volts    | Amps |    |                        | Volts<br>DC       | Amps<br>DC | Output<br>Watts | Volts<br>DC | MA<br>DC | Full Input<br>Watts |
| HF200    | 11       | 4    | 18 | 150                    | 2,000             | 0.200      | 300             | -250        | 23       | 30                  |
| HF201A   | 11       | 4    | 18 | 150                    | 200               | 0.200      | 300             | -250        | 23       | 30                  |
| HF300    | 11.0     | 4    | 23 | 200                    | 3,000             | 0.250      | 600             | -400        | 28       | 20                  |

| MAX. FREQ.<br>mc | INTERELECTRODE<br>CAPACITANCE $-\mu\mu f$ |                 |               | DESCRIPTION                                                                                                                                                                                                                                                                             | TYPE NO.       |
|------------------|-------------------------------------------|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|                  | G-P                                       | G-F             | P-F           |                                                                                                                                                                                                                                                                                         |                |
| Full Input Watts |                                           |                 |               |                                                                                                                                                                                                                                                                                         |                |
| 200              | <0.1                                      | Input<br>Output | 6.2<br>2.6    | High-gain twin tetrode for use as Class C amplifier, oscillator, frequency multiplier and modulator, ICAS plate input = 30 watts up to 200 mc. Capable of delivering 18.5 watts output at 200 mc.                                                                                       | 6360<br>6360 A |
| 60               | 0.22                                      | 13.5            | 8.5           | Beam power tube for use as RF power amplifier, oscillator, frequency multiplier, AF power amplifier or modulator for mobile and fixed equipment. Anode capable of dissipating 25 watts ICAS.                                                                                            | 6883           |
| 300              | —                                         | Input<br>Output | 4.0<br>1.3    | Twin tetrode, radiation-cooled. Special Amperex design for mobile service, HF version of conventional 832A. Ideal multiplier & straight amplifier & modulator. Useful up to 1000 mc. Delivers 15 watts at 600 mc, CCS.                                                                  | 6907           |
| 500              | 2x0.15                                    | 2x6.4           | 2x1.6         | High-gain twin tetrode for use as Class C amplifier, oscillator, frequency multiplier & modulator. ICAS plate input = 14 watts up to 500 mc. Capable of delivering 7.5 watts output at 500 mc.                                                                                          | 6939           |
| 250              | 0.03                                      | 15.7            | 4.5           | Forced-air cooled external anode tetrode. Brazed radiator. Interchangeable with 4X150A where higher plate dissipation is required.                                                                                                                                                      | 6979           |
| 960              | 0.145                                     | 4.5             | 1.35          | Radiation cooled twin tetrode designed for push-pull Class C operation at frequencies up to 1000 Mc.                                                                                                                                                                                    | 7377           |
| 500              | 0.03                                      | 17              | 4.5           | Forced-air cooled, beam power tetrode built of ceramic and metal, especially for SSB and other linear RF amplifier applications at altitudes to 20,000 ft.                                                                                                                              | 7580           |
| 30               | 0.9                                       | —               | —             | Radiation and convection cooled all-glass beam-power tetrode especially designed for use as an AF and RF amplifier, oscillator, and frequency multiplier for operation at frequencies up to 30 mc.                                                                                      | 7378           |
| 110              | 0.12                                      | 12.7            | 4.9           | All glass tetrode. Designed for amplifier, oscillator, or modulator service extending in the VHF region at frequencies up to 110 mc.                                                                                                                                                    | 7527           |
| 500              | 0.03                                      | Input<br>Output | 15.5<br>4.5   | A tetrode designed for use as an RF power amplifier and oscillator. The plate is forced air cooled; the cathode is oxide coated, indirectly heated. Similar to 4X150D except that it is designed for aircraft use and other applications in which resistance to vibration is important. | 7609           |
| 400              | 0.15                                      | 6.4             | 1.6           | Miniature twin tetrode featuring frame grid construction. It is a reduced height version of the 6939 for compact equipment.                                                                                                                                                             | 7645           |
| 175              | 0.09                                      | Input<br>Output | 11.6<br>3.7   | Twin tetrode. Designed for use as an RF power amplifier, oscillator, modulator and frequency multiplier. Heat sink or forced-air cooling is necessary at or near maximum ratings. Built-in cross neutralizing capacitors insure neutralization over entire band. Useful to 500 mc.      | 7854           |
| 200              | 0.08                                      | 6.8             | 3.2           | Quick heating twin tetrode having a filament designed for hybrid mobile transceivers for power output, driver or frequency multiplier circuits. Internally neutralized up to 200 mc                                                                                                     | 7983           |
| —                | 0.24                                      | 13              | 8.5           | "Harp Cathode" instant heating beam power tetrode for use as power output, oscillator or frequency multiplier in mobile or base equipment. Full output power is available in less than one half second after filament power is applied.                                                 | 8042           |
| 175              | 0.09                                      | 11.8<br>Input   | 3.7<br>Output | Twin tetrode designed and rated for SSB applications where 26.5 v is available for heater. Particularly adapted to heat sink cooling because of calibrated glass envelope.                                                                                                              | 8116           |
| 175              | 0.09                                      | 11.8<br>Input   | 3.7<br>Output | Twin tetrode designed and rated for SSB applications where 12.6 v is available for the heater.                                                                                                                                                                                          | 8117           |
| 900              | 0.15                                      | 46              | 6             | Ceramic coaxial power tetrode useful as a UHF amplifier or oscillator up to 1000 mc.                                                                                                                                                                                                    | 8177           |
| 30               | 0.1                                       | 47              | 9.5           | Radiation and/or air-cooled tetrode for use as an AM or SSB amplifier. Features low distortion.                                                                                                                                                                                         | 8179           |

| INTERELECTRODE<br>CAPACITANCE $-\mu\mu f$ |     |     | DESCRIPTION                                                                                                                                                            | TYPE NO. |
|-------------------------------------------|-----|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| G-P                                       | G-F | P-F |                                                                                                                                                                        |          |
| 6.9                                       | 6.2 | 1.2 | Radiation-cooled triode for use as an RF power amplifier, oscillator and class B audio amplifier or modulator.                                                         | HF200    |
| 7.0                                       | 8.8 | 1.2 | Radiation-cooled triode especially designed for use as an AF and RF amplifier and oscillator.                                                                          | HF201A   |
| 7.0                                       | 6.0 | 1.0 | Radiation-cooled triode. Ideally suited for initial replacement of competitive types. Widely used in RF heating applications, and commercial, and police transmitters. | HF300    |