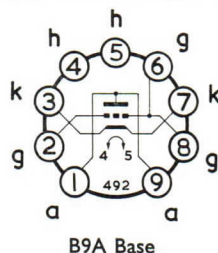


### U.H.F. TRIODE



#### GENERAL

This frame grid triode is for use as a grounded grid U.H.F. oscillator and mixer for bands IV and V.

|  |                       |     |            |
|--|-----------------------|-----|------------|
| Heater Current                             | $I_h$                 | 0.3 | A          |
| Heater Voltage                             | $V_h$                 | 3.8 | V          |
| <b>RATINGS</b>                             |                       |     |            |
| Maximum Anode Dissipation                  | $P_a(\max)$           | 2.2 | W          |
| Maximum Anode Supply Voltage               | $V_{a(b)\max}$        | 550 | V          |
| Maximum Anode Voltage                      | $V_a(\max)$           | 220 | V          |
| Maximum Negative Grid Voltage              | $-V_g(\max)$          | 50  | V          |
| Maximum Heater to Cathode Voltage (R.M.S.) | $V_{h-k(r.m.s.)\max}$ | 90  | V          |
| Maximum Cathode Current                    | $I_k(\max)$           | 20  | mA         |
| Maximum Grid to Cathode Resistance         | $R_{g-k(\max)}$       | 1.0 | M $\Omega$ |

#### INTER-ELECTRODE CAPACITANCES

|                                 |               |      |     |    |
|---------------------------------|---------------|------|-----|----|
| Anode to Grid                   | $C_{a-g}$     | 2.2  | †   | pF |
| Anode to Cathode                | $C_{a-k}$     | 0.24 |     | pF |
| Grid to Cathode                 | $C_{g-k}$     | 3.5  |     | pF |
| Grid to Heater                  | $C_{g-h}$     | 0.3  |     | pF |
| Cathode to Grid, Heater         | $C_{k-g,h}$   | 6.3  |     | pF |
| Grid to Cathode, Heater         | $C_{g-k,h}$   | 3.8  |     | pF |
| Anode to Cathode, Heater        | $C_{a-k,h}$   | 0.35 |     | pF |
| Anode to Grid, Heater           | $C_{a-g,h}$   | 2.3  |     | pF |
| Anode to Grid, Shield           | $C_{a-g,s}$   |      | 3.3 | pF |
| Cathode, Heater to Grid, Shield | $C_{k,h-g,s}$ |      | 4.1 | pF |
| Anode to Cathode, Heater        | $C_{a-k,h}$   |      | 0.3 | pF |

\* In fully shielded socket without can (I.E.C. Publication 100).

† In fully shielded socket with can (I.E.C. Publication 100).

#### CHARACTERISTICS

|  |          |      |            |
|--|----------|------|------------|
| Anode Voltage                                      | $V_a$    | 175  | V          |
| Grid Voltage                                       | $V_g$    | -1.5 | V          |
| Anode Current                                      | $I_a$    | 12   | mA         |
| Mutual Conductance                                 | $g_m$    | 14   | mA/V       |
| Valve Anode Resistance ( $\delta v_a/\delta i_a$ ) | $r_a$    | 4.85 | k $\Omega$ |
| Amplification Factor                               | $\mu$    | 68   |            |
| Equivalent Grid Noise Resistance                   | $R_{eq}$ | 230  | $\Omega$   |

#### TYPICAL OPERATION—As a Self-Oscillating Mixer

|                         |            |     |     |            |
|-------------------------|------------|-----|-----|------------|
| Anode Supply Voltage    | $V_{a(b)}$ | 220 | 220 | V          |
| Anode Resistance        | $R_a$      | 5.6 | 5.6 | k $\Omega$ |
| Grid Resistance         | $R_g$      | —   | 47  | k $\Omega$ |
| Cathode Bias Resistance | $R_k$      | 220 | —   | $\Omega$   |
| Anode Current           | $I_a$      | 12  | 12  | mA         |
| Grid Current            | $I_g$      | —   | 50  | $\mu$ A    |
| Conversion Conductance  | $g_c$      | 5.5 | 5.5 | mA/V       |

‡ Cathode self bias      § Grid current bias

