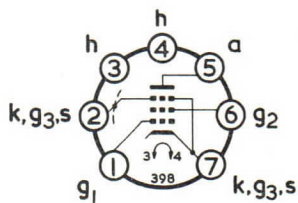


### SHARP CUT-OFF V.H.F. PENTODE



B7G Base

#### GENERAL

This low noise, high slope pentode is primarily intended for use as an R.F. or I.F. amplifier.

|                |       |       |   |
|----------------|-------|-------|---|
| Heater Voltage | $V_h$ | 6.3   | V |
| Heater Current | $I_h$ | 0.175 | A |

#### RATINGS

|  |                  |     |    |
|--|------------------|-----|----|
| Maximum Anode Dissipation                    | $P_{a(max)}$     | 1.7 | W  |
| Maximum Screen Grid Dissipation              | $P_{g2(max)}$    | 0.5 | W  |
| Maximum Anode Voltage                        | $V_{a(max)}$     | 180 | V  |
| Maximum Screen Grid Voltage ( $I_{g2} = 0$ ) | $V_{g2(b)max}$   | 180 | V  |
| Maximum Screen Grid Voltage                  | $V_{g2(max)}$    | 90  | V  |
| Maximum Peak Heater to Cathode Voltage       | $V_{h-k(pk)max}$ | 120 | V  |
| Maximum Cathode Current                      | $I_k(max)$       | 18  | mA |

#### INTER-ELECTRODE CAPACITANCES\*

|                       |            |       |    |
|-----------------------|------------|-------|----|
| Input                 | $C_{in}$   | 4.0   | pF |
| Output                | $C_{out}$  | 2.1   | pF |
| Anode to Control Grid | $C_{a-g1}$ | <0.03 | pF |

\* Measured without an external shield.

#### CHARACTERISTICS

|   |                         |      |      |            |
|---|-------------------------|------|------|------------|
| Anode Voltage   | $V_a$                   | 120  | 180  | V          |
| Screen Grid Voltage   | $V_{g2}$                | 120  | 120  | V          |
| Anode Current   | $I_a$                   | 7.5  | 7.7  | mA         |
| Screen Grid Current   | $I_{g2}$                | 2.5  | 2.4  | mA         |
| Cathode Bias Resistance                                       | $R_k$                   | 180  | 180  | $\Omega$   |
| Mutual Conductance  | $g_m$                   | 5.0  | 5.1  | mA/V       |
| Valve Anode Resistance ( $\delta V_a / \delta I_a$ ) (approx) | $r_a$                   | 0.3  | 0.5  | M $\Omega$ |
| Control Grid Voltage for $I_a = 10\mu A$ (approx)             | $V_{g1(I_a = 10\mu A)}$ | -8.5 | -8.5 | V          |

