

ADMIRALTY SIGNAL ESTABLISHMENT

| | | |
|--|------------------------------------|----------------------------|
| Specification AD/CV303/Issue 4 Dated 18.2.46. To be read in conjunction with K1001 | <u>SECURITY</u> | |
| | <u>Specification</u> Restricted | <u>Valve</u> Restricted |

| | |
|---|--|
| <u>TYPE OF VALVE:-</u> Variable-mu H.F. Pentode. <u>CATHODE:-</u> Indirectly heated. <u>ENVELOPE:-</u> Glass, enclosed in metal shell. <u>PROTOTYPE:-</u> EF22. | <u>MARKING</u> |
| | See K1001/4. <i>PACKAGING</i> <i>SEE K1005</i> |

| <u>RATING</u> | | Note | <u>BASE AND CONNECTIONS</u> <u>B8G (MOD.)</u> | |
|-----------------------------------|--------|------|--|--------------------------|
| | | | Pin | Electrode |
| Heater Voltage (V) | 6.3 | A | 1 | Heater |
| Heater Current (A) | 0.2 | | 2 | Anode |
| Max. Anode Voltage (V) | 550 | | 3 | Grid 2 |
| Max. Anode Voltage (V) | 300 | | 4 | Grid 3, internal shield. |
| Max. Cathode Current (mA) | 10 | B | 5 | No connection |
| Max. Anode Dissipation (W) | 2 | | 6 | Grid 1 |
| Max. Screen Grid Voltage (V) | 300 | C | 7 | Cathode |
| Mutual Conductance (mA/V) | 2.2 | | 8 | Heater |
| Internal Resistance ($M\Omega$) | 1.2 | C | Spigot Metal shell | |
| Max. Screen Grid Dissipation (W) | 0.3 | | <u>DIMENSIONS</u> See drawing, Page 3. | |
| <u>CAPACITANCES (pF. approx)</u> | | | | |
| Cag | <0.002 | | | |
| Cae | 6.4 | | | |
| Cg1e | 5.5 | | | |
| Cg1h | <0.004 | | | |

NOTES

- A. For $I_a = 0$ mA.
- B. For $I_a < 3$ mA.
- C. Measured at $V_a = 250$ V, $V_{g2} = 100$ V, $V_{g1} = -2.5$ V and $I_a = 6.0$ mA.

TESTS

To be performed in addition to those applicable in K1001.

| | Test Conditions | | | | | Test | Limits | | No. Tested | Note |
|---|-----------------|--|------------|------------|------------|--------------------|--------|-------|--------------|------|
| | Vh (V) | Va (V) | Vg3 (V) | Vg2 (V) | Vg1 (V) | | Min. | Max. | | |
| a | 6.3 | - | - | - | - | Ih (A) | 0.192 | 0.208 | 100% or S | |
| b | 6.3 | 30 (AC) | 30 (AC) | 30 (AC) | 30 (AC) | Ie (mA) | 4.9 | - | 100% | |
| c | 6.3 | 300 | 0 | 100 | 0 | Ia (mA) | 10.5 | 15.5 | 100% | |
| d | 6.3 | 300 | 0 | 100 | -6 | Ia (mA) | 1.3 | 2.7 | 100% | |
| e | 6.3 | 300 | 0 | 100 | -27 | Ia (μA) | - | 15 | 100% | 1 |
| f | 6.3 | 300 | 0 | 100 | | Ig2 (mA) | 1.3 | 1.9 | 100% | 2 |
| g | 6.3 | 300 | 0 | 100 | | Reverse Ig (μA) | - | 0.6 | 100% | 2 |
| h | 6.3 | 150 V between H and C (cathode positive). | | | | Insulation (μA) | - | 45 | 100% | 3 |

NOTES

1. Protective Resistance of 1 M Ω in anode circuit.
2. Cathode Resistance of 330 Ω .
3. Protective Resistance of 1 M Ω in series.

