

| | | |
|--|------------------------------------|----------------------------|
| Specification MAP/CV1079/Issue 6 Dated 5.3.47. To be read in conjunction with K1001. | <u>SECURITY</u> | |
| | <u>Specification</u> RESTRICTED | <u>Valve</u> RESTRICTED |

→ Indicates a change

| <u>TYPE OF VALVE</u> - Tetrode (pentode characteristic) <u>CATHODE</u> - Indirectly heated <u>ENVELOPE</u> - Glass-unmetallised <u>PROTOTYPE</u> - KT8 | | <u>MARKING</u> See K1001/4 | | | | | | | | | | | | | | | |
|---|---------------------------------------|--|--------------------------------------|-----------|------|-------------|---|--------------|--------|--------|----|--------|---|---------------------------------------|------|-------|--|
| <u>RATING</u> | | <u>Note</u> | <u>BASE</u> B5 (ceramic) | | | | | | | | | | | | | | |
| Heater Voltage (V) 6.3 Heater Current (A) 1.25 Max. Anode Voltage (V) 600 Max. Screen Voltage (V) 300 Max. Anode Dissipation (W) 25 Max. Screen Dissipation (W) 3.5 Mutual Conductance (mA/V) 6.5 Max. Operating Frequency (Mc/s) 65 | A | <table border="1"> <thead> <tr> <th>Pin</th> <th>Electrode</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Screen grid</td> </tr> <tr> <td>2</td> <td>Control grid</td> </tr> <tr> <td>3</td> <td>Heater</td> </tr> <tr> <td>4</td> <td>Heater</td> </tr> <tr> <td>5</td> <td>Cathode (and suppressor grid if used)</td> </tr> <tr> <td>T.C.</td> <td>Anode</td> </tr> </tbody> </table> | Pin | Electrode | 1 | Screen grid | 2 | Control grid | 3 | Heater | 4 | Heater | 5 | Cathode (and suppressor grid if used) | T.C. | Anode | |
| Pin | Electrode | | | | | | | | | | | | | | | | |
| 1 | Screen grid | | | | | | | | | | | | | | | | |
| 2 | Control grid | | | | | | | | | | | | | | | | |
| 3 | Heater | | | | | | | | | | | | | | | | |
| 4 | Heater | | | | | | | | | | | | | | | | |
| 5 | Cathode (and suppressor grid if used) | | | | | | | | | | | | | | | | |
| T.C. | Anode | | | | | | | | | | | | | | | | |
| <u>CAPACITANCES (pF)</u> Cae 5.5 Cge 15.3 Cag 0.5 | | | <u>TOP CAP</u> See K1001/AI/D5.1 | | | | | | | | | | | | | | |
| <u>NOTE</u> A. $V_a = 250V.$, $V_{g2} = 250V.$, $I_a = 100mA.$ | | | <u>DIMENSIONS</u> See K1001/AI/D1 | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Dimension</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>A (mm)</td> <td>-</td> <td>145</td> </tr> <tr> <td>B (mm)</td> <td>-</td> <td>57</td> </tr> </tbody> </table> | Dimension | Min. | Max. | A (mm) | - | 145 | B (mm) | - | 57 | | | | | | |
| Dimension | Min. | Max. | | | | | | | | | | | | | | | |
| A (mm) | - | 145 | | | | | | | | | | | | | | | |
| B (mm) | - | 57 | | | | | | | | | | | | | | | |

To be performed in addition to those applicable in K1001.

| | Test Conditions | | | Test | Limits | | No. Tested | | | |
|---|-----------------|---------------|---|--------------------------|--------|------|------------------|-----|---|-----|
| | | | | | Min. | Max. | | | | |
| a | See K1001/AIII | | | <u>CAPACITANCES (pF)</u> | | | 6 per week | | | |
| | Links to H.P. | Links to L.P. | Links to E | | | | | | | |
| | TC1 | 2 | 1,3,4,5, 6,7,8,9, 10, TC1, TC2 | | | | | Cag | - | 0.5 |
| | TC1 | 1,3,4, 5 | 2,6,7,8, 9,10, TC2 | | | | | Cae | - | 6.5 |
| | 2 | 1,3,4, 5 | 6,7,8,9, 10, TC1, TC2 | Cge | - | 16.0 | | | | |

Before the following tests are made, the valve shall be run for a period of 4 minutes with $V_a = V_{g2} = 250$, $I_a = 100\text{mA}$.

| | Vh | Va | Vg2 | Ia(mA) | | | | |
|---|-----|---|-----|--------|-------------------------------|------|-------|--------------|
| b | 6.3 | 0 | 0 | 0 | Ih (A) | - | 1.4 | 100% or S |
| c | 6.3 | 250 | 250 | 100 | Vg1 (V) | -7.5 | -12.5 | 100% |
| d | 6.3 | 250 | 250 | 100 | Reverse Ig1 (μA) | - | 3.0 | 100% |
| e | 6.3 | 250 | 250 | 100 | Ig2 (mA) | - | 12.5 | 100% or S |
| f | 6.3 | 250 | 250 | 100 | gm (mA/V) | 5.0 | 8.0 | 100% |
| | | Peak grid swing $\pm 1\text{V}$, max. | | | | | | |
| g | 6.3 | 250 | 250 | 2.5 | Vg1 (V) | - | -50 | 100% |