

|                                                                                                                         |                       |              |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|
| Specification MAP/CV276/Issue 3<br>Dated 19.1.49<br>To be read in conjunction with<br>K1001 ignoring clauses: 5.2, 5.3. | <u>SECURITY</u>       |              |
|                                                                                                                         | <u>Specification</u>  | <u>Valve</u> |
|                                                                                                                         | <del>RESTRICTED</del> | UNCLASSIFIED |

→ Indicates a change

|                                                         |        |      |      |                                |                  |
|---------------------------------------------------------|--------|------|------|--------------------------------|------------------|
| <u>TYPE OF VALVE</u> - Dwarf Tetrode<br>(Aligned grids) |        |      |      | <u>MARKING</u><br>See K.1001/4 |                  |
| <u>CATHODE</u> - Indirectly heated                      |        |      |      | <u>PACKING</u><br>See K.1005   |                  |
| <u>ENVELOPE</u> - Glass-unmetallised                    |        |      |      |                                |                  |
| <u>RATING</u>                                           |        |      | Note | <u>BASE</u><br>I.O.            |                  |
|                                                         |        |      |      | <u>Pin</u>                     | <u>Electrode</u> |
| Heater Voltage                                          | (V)    | 6.3  |      | 1                              | No connection    |
| Heater Current                                          | (A)    | 0.9  |      | 2                              | Heater           |
| <u>Series Modulator</u>                                 |        |      |      | 3                              | No connection    |
| Max. Anode Voltage                                      | (kV)   | 3.0  |      | 4                              | Screen grid      |
| Max. Anode Dissipation                                  | (W)    | 5.0  |      | 5                              | Control grid     |
| Max. Screen Dissipation                                 | (W)    | 1.0  |      | 6                              | No connection    |
| <u>Break Modulator</u>                                  |        |      |      | 7                              | Heater           |
| Max. Peak Anode Voltage                                 | (kV)   | 10.0 |      | 8                              | Cathode          |
| Max. Anode Dissipation                                  | (W)    | 5.0  |      | Side                           |                  |
| Max. Screen Voltage                                     | (V)    | 550  |      | Contact                        | Anode            |
| Max. Screen Dissipation                                 | (W)    | 1.0  |      | <u>PLUG SIDE CAP</u>           |                  |
| Max. Negative Grid Bias                                 | (V)    | 500  |      | See K.1001/AI/D5.2             |                  |
| Max. Grid to Screen Vol-<br>tage                        | (kV)   | 1.0  |      | <u>DIMENSIONS</u>              |                  |
| Max. Peak Cathode Current                               | (A)    | 1.6  | A    | See drawing on page 3.         |                  |
| Mutual Conductance                                      | (mA/V) | 4.4  | B    |                                |                  |

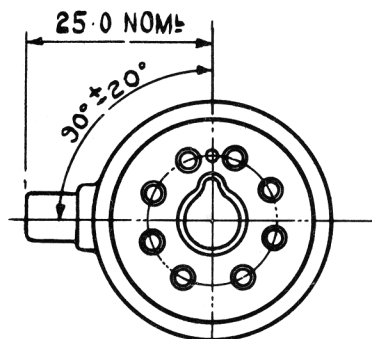
## NOTES

- A: With pulse length not exceeding 20  $\mu$ secs.
- B: With  $V_a = V_{g2} = 200V.$ ,  $I_a = 25mA.$
- C: The valve may be mounted horizontally only if the side contact is also horizontal, i.e. the major axis of the grids must be vertical.

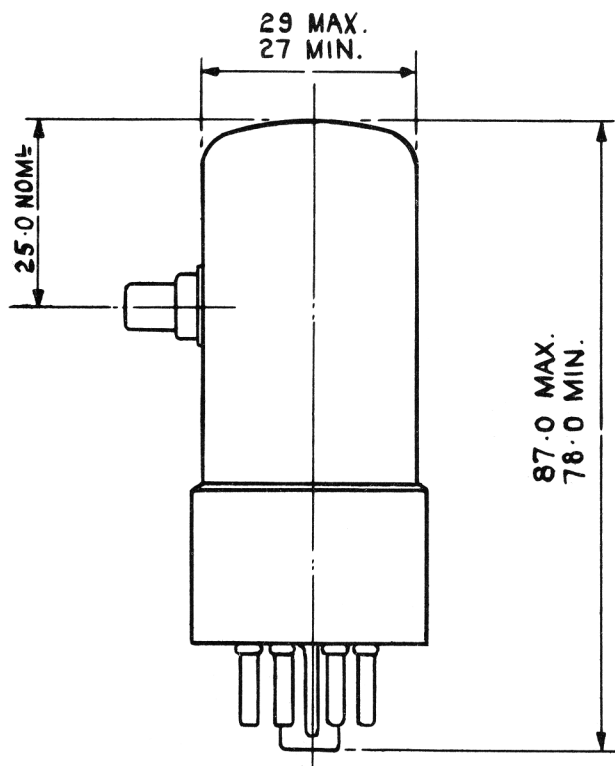
TESTS

To be performed in addition to those applicable in K.1001.

| Test Conditions                                                                                                                                                                 |     |                                   |     |         |        | Test                                                                                                                                                                                                                  | Limits |      | No.<br>Tested |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------|-----|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|---------------|
|                                                                                                                                                                                 | Vh  | Va                                | Vg2 | Vg1     | Ia(mA) |                                                                                                                                                                                                                       | Min.   | Max. |               |
| a                                                                                                                                                                               | 6.3 | 0                                 | 0   | 0       | 0      | Ih (A)                                                                                                                                                                                                                | 0.8    | 1.0  | 100% or S     |
| b                                                                                                                                                                               | 6.3 | 200                               | 200 | -       | 25     | Ig2 (mA)                                                                                                                                                                                                              | -      | 4.0  | 100% or S     |
| c                                                                                                                                                                               | 6.3 | 200                               | 200 | -       | 25     | Reverse Igl ( $\mu$ A)                                                                                                                                                                                                | -      | 1.0  | 100%          |
| d                                                                                                                                                                               | 6.3 | 200                               | 200 | -60     | -      | Reverse Igl ( $\mu$ A)                                                                                                                                                                                                | -      | 7.0  | 100%          |
| e                                                                                                                                                                               | 6.3 | Cathode 150V. positive to heater. |     |         |        | Ic ( $\mu$ A)                                                                                                                                                                                                         | -      | 40   | 100%          |
| f                                                                                                                                                                               | 6.3 | 500                               | 500 | 40 max. | -      | Ia (A)                                                                                                                                                                                                                | 1.6    | -    | 100%          |
| Vg1 shall be applied as an intermittent pulse of 10 to 12 $\mu$ secs. duration with a 400:1 off:on ratio. Ia measurement is to be made when Vg1 is not more than 40V. positive. |     |                                   |     |         |        |                                                                                                                                                                                                                       |        |      |               |
| g                                                                                                                                                                               | 6.3 | 5.0 kV.                           | 500 | -       | 0.5    | Vg1 (V)<br>The valve shall be processed until it can withstand the stated conditions for a period of one minute without flashing. Once the conditions have been met they need not be repeated for acceptance testing. | -      | -130 | 100%          |



VIEW OF UNDERSIDE  
OF BASE



ALL DIMENSIONS IN MILLIMETRES.