

ADMIRALTY SIGNAL ESTABLISHMENT

|  |                             |                              |
|--|-----------------------------|------------------------------|
| Specification AD/CV16/Issue 4.<br>Dated 13.11.46.<br>To be read in conjunction with K1001,<br>ignoring clauses:- 5.2, 5.3. | <u>SECURITY</u>             |                              |
|  | <u>Specn.</u><br>Restricted | <u>Valve</u><br>Unclassified |

|   |   |
|---|---|
| <p><u>TYPE OF VALVE</u>:- UHF triode with grounded grid, designed for use at 600 Mc/s.</p> <p><u>CATHODE</u>:- Indirectly heated. Oxide coated on one side only. Cathode strapped to one heater lead.</p> <p><u>ENVELOPE</u>:- Glass, unmetallised.</p> <p><u>PROTOTYPE</u>:- S25A.</p> | <p><u>MARKING</u></p> <p>See K1001/4.</p> |
|---|---|

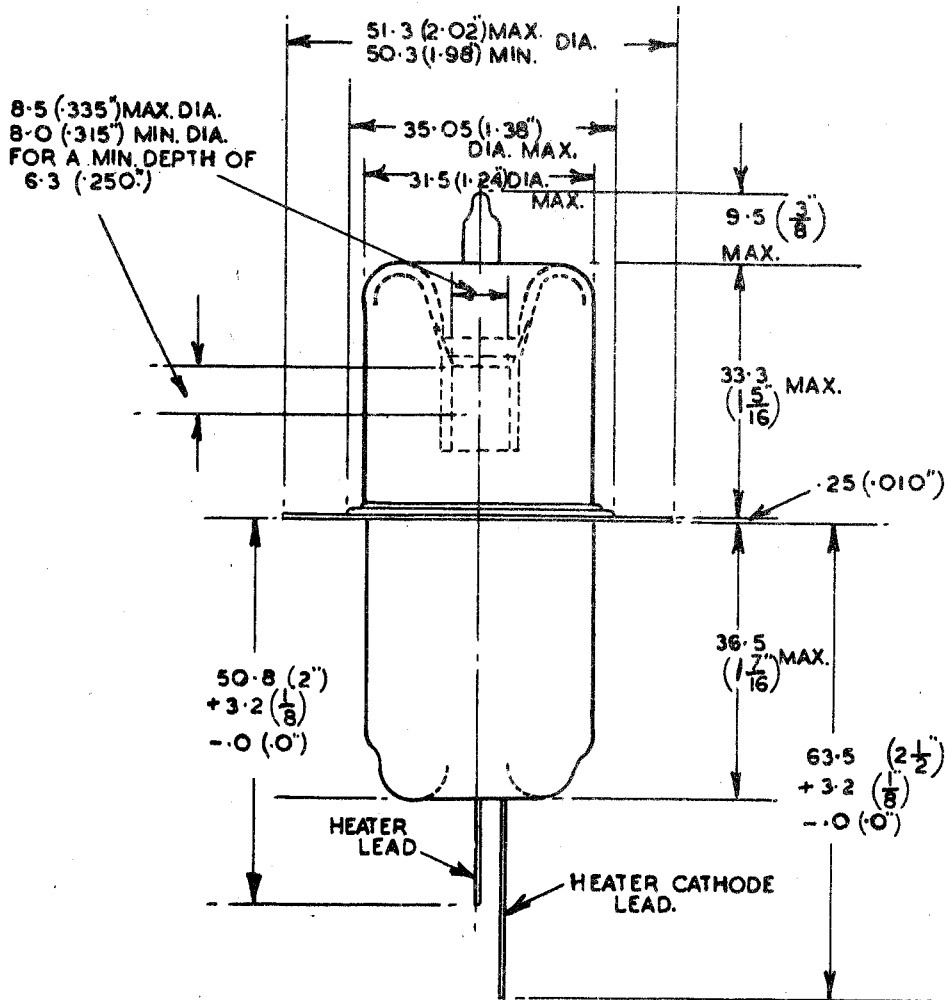
| <u>RATING</u>              |       | Note | <u>DIMENSIONS AND CONNECTIONS</u>   |
|----------------------------|-------|------|---|
| Heater Voltage (V)         | 4.0   |      | See Fig. 1.   |
| Heater Current (A)         | 0.65  |      |   |
| Max. Anode Voltage (V)     | 350   |      | <u>PACKING</u>  |
| Autobias Resistance (ohms) | 150   |      | See K1001/7.  |
| Max. Anode Dissipation (W) | 2     |      | <u>NOTES</u>  |
| Max. Anode Dissipation (W) | 3     |      | A. With adequate cooling.   |
| Amplification Factor       | 100   |      | B. At $V_h = 4.0$ V,<br>$V_a = 250$ V,<br>$V_g$ autobias resistance = $150\Omega$ |
| Mutual Conductance (mA/V)  | 5     | B    |   |
| <u>CAPACITANCES (pF.)</u>  |       |      |   |
| Cag                        | 1.6   |      |   |
| Cgc                        | 4.0   |      |   |
| Cac                        | 0.035 |      |   |

TESTS

To be performed in addition to those applicable in K1001.

|   | Test Conditions                                 |        |                   | Test  | Limits |       | No. Tested |
|---|---|--------|-------------------|---|--------|-------|------------|
|   | Vh (V)  | Va (V) | Vg (V)            |   | Min.   | Max.  |            |
| a | 4.0   | 0      | 0                 | Ih (A)  | 0.575  | 0.725 | 100%       |
| b | 4.0   | 250    |                   | Ia (mA)                                       | 3.75   | 9.0   | 100%       |
| c | 4.0   | 250    | Auto-bias         | Slope (mA/V)<br>(Dynamic measurement)         | 4.25   |       | 100%       |
| d | 4.0   | 250    | thro'<br>150 ohms | Amplification Factor<br>(Dynamic measurement) | 85     |       | 100%       |
| e | 4.0   | 300    | -1                | Reverse Ig (μA)                               |        | 1.0   | 100%       |
| f | 0   | 0      | 0                 | <u>Capacitances</u><br>(pF)                   |        |       |            |
|   | With valve cold and earthed shield around bulb. |        |                   | i. Cag  |        | 1.8   | 6 per week |
|   |   |        |                   | ii. Cgc                                       |        | 6.0   |            |
|   |   |        |                   | iii. Cac                                      |        | 0.05  | T.A.       |

FIG. 1



ALL DIMENSIONS IN MILLIMETRES EXCEPT WHERE OTHERWISE STATED.