

ADMIRALTY SIGNAL ESTABLISHMENT

ASWE

(NR73)

|                                       |                            |
|---------------------------------------|----------------------------|
| Specification AD/CV1285/Issue 3       | <u>SECURITY</u>            |
| Dated 30.10.46.                       | <u>Specn.</u> <u>Valve</u> |
| To be read in conjunction with K1001. | Restricted   Unclassified  |

|                                                             |              |        |                       |                                       |               |      |
|-------------------------------------------------------------|--------------|--------|-----------------------|---------------------------------------|---------------|------|
| <u>TYPE OF VALVE:-</u> Double Triode, with common cathodes. |              |        | <u>MARKING</u>        |                                       |               |      |
| <u>CATHODES:-</u> Indirectly heated.                        |              |        | See K1001/4.          |                                       |               |      |
| <u>ENVELOPE:-</u> Glass, clear.                             |              |        |                       |                                       |               |      |
| <u>PROTOTYPE:-</u> ECC 31.                                  |              |        |                       |                                       |               |      |
| <u>RATING</u><br>(For each Triode Section)                  |              |        | Note                  | <u>BASE</u><br>IO<br>See K1001/AIV/D2 |               |      |
|                                                             |              |        |                       | M<br>Dimension<br>(V)<br>applies      |               |      |
| Heater Voltage                                              | (V)          | 6.3    | A<br>A<br>A<br>A<br>A | Pin                                   | Electrode     |      |
| Heater Current                                              | (A)          | 0.95   |                       | 1                                     | No connection |      |
| Max. Anode Voltage                                          | (V)          | 300    |                       | 2                                     | Heater        |      |
| Anode Current                                               | (mA)         | 6      |                       | 3                                     | Anode 1       |      |
| Mutual Conductance                                          | (mA/V)       | 2.3    |                       | 4                                     | Grid 1        |      |
| Amplification Factor                                        |              | 32     |                       | 5                                     | Grid 2        |      |
| Anode Impedance                                             | ( $\Omega$ ) | 14,000 |                       | 6                                     | Anode 2       |      |
| Max. Anode Dis-<br>sipation                                 | (W)          | 5      |                       | 7                                     | Heater        |      |
| Max. Cathode Current                                        | (mA)         | 50     |                       | 8                                     | Cathode       |      |
| <u>CAPACITANCES (pF approx.)</u>                            |              |        |                       | <u>DIMENSIONS</u><br>See K1001/AI/D1  |               |      |
| Ca-all                                                      |              | 1.0    |                       | Dimension                             | Min.          | Max. |
| Triode 1                                                    | { Cag        | 3.4    |                       | A mm                                  | -             | 118  |
|                                                             | { Cgc        | 4.0    |                       | B mm                                  | -             | 46   |
|                                                             | { Cac        | 1.9    |                       |                                       |               |      |
| Triode 2                                                    | { Cag        | 3.75   |                       | <u>PACKING</u>                        |               |      |
|                                                             | { Cgc        | 4.0    |                       | See K1001/7.                          |               |      |
|                                                             | { Cac        | 1.0    |                       |                                       |               |      |

NOTEA. At  $V_a = 250$  V,  $V_g = -4.6$  V.

TESTS

To be performed in addition to those applicable in K1001.

The following tests to be applied to each triode in turn :-

|   | Test Conditions |           |           | Test                  | Limits |      | No.<br>Tested |
|---|-----------------|-----------|-----------|-----------------------|--------|------|---------------|
|   | Vh<br>(V)       | Va<br>(V) | Vg<br>(V) |                       | Min.   | Max. |               |
| a | 6.3             | -         | -         | Ih (A)                | 0.85   | 1.05 | 100%<br>or S  |
| b | 6.3             | 250       | 0         | Ia (mA)               | 16.0   | 23.5 | 100%          |
| c | 6.3             | 250       | -4        | Ia (mA)               | 5.5    | 9.0  | 100%          |
| d | 6.3             | 250       | -8        | Ia tail (mA)          | -      | 2.0  | 100%          |
| e | 6.3             | 250       | -4        | Reverse Ig ( $\mu$ A) | -      | 1.5  | 100%          |
| f | 6.3             | 25        | 25        | Ie (mA)               | 36     | -    | 100%          |