

MINISTRY OF SUPPLY (S.R.D.E.)

Specification: MOS/CV201/Issue 4

Dated:- 5.9.77

To be read in conjunction with K1001.

SECURITYSpecificationValve~~Restricted~~

Unclassified

Unclass

→ indicates a change

|                                                                     |        |      |                                      |           |               |      |
|---------------------------------------------------------------------|--------|------|--------------------------------------|-----------|---------------|------|
| <u>TYPE OF VALVE:-</u> Beam tetrode<br>(aligned grids)              |        |      | <u>MARKING</u>                       |           |               |      |
| <u>CATHODE:-</u> Directly heated                                    |        |      | See K1001/4                          |           |               |      |
| <u>ENVELOPE:-</u> Glass - unmetallised                              |        |      |                                      |           |               |      |
| <u>PROTOTYPE:-</u> V.630                                            |        |      |                                      |           |               |      |
| <u>RATING</u>                                                       |        | Note | <u>BASE</u><br>I.O.                  |           |               |      |
|                                                                     |        |      | Pin                                  | Electrode |               |      |
| Filament voltage                                                    | (V)    | 2.2  | A                                    | 1         | No connection |      |
| Filament current                                                    | (A)    | 1.1  |                                      | 2         | Filament      |      |
| Max. anode voltage                                                  | (V)    | 300  |                                      | 3         | Beam plates   |      |
| Max. screen voltage                                                 | (V)    | 200  |                                      | 4         | Screen grid   |      |
| Max. anode dissipation                                              | (W)    | 7.5  |                                      | 5         | Control grid  |      |
| Mutual conductance                                                  | (mA/V) | 3.3  |                                      | 6         | Pin omitted   |      |
| <u>CAPACITANCES(pF)</u>                                             |        | 0.25 |                                      | 7         | Filament      |      |
|                                                                     |        |      |                                      | 8         | No connection |      |
|                                                                     |        |      | T.C                                  | Anode     |               |      |
|                                                                     |        |      | <u>TOPCAP</u><br>See K1001/AI/D 5.2. |           |               |      |
|                                                                     |        |      |                                      |           |               |      |
| <u>NOTES</u>                                                        |        |      | <u>DIMENSIONS</u><br>See K1001/AI/D1 |           |               |      |
| A. Measured at $V_a = 250$ ,<br>$V_{g_2} = 150$ ,<br>$I_a = 25$ mA. |        |      | Dimension                            |           | Min           | Max  |
|                                                                     |        |      | A mm                                 |           | 107           | 117  |
|                                                                     |        |      | B mm                                 |           | -             | 30.5 |

TESTS

To be performed in addition to those applicable in K1001

|   | Test Conditions    |                    |                                  |              |    |         | Test                       | Limits |       | No.<br>Tested    |
|---|--------------------|--------------------|----------------------------------|--------------|----|---------|----------------------------|--------|-------|------------------|
|   |                    |                    |                                  |              |    |         |                            | Min.   | Max.  |                  |
| a | See K1001/AIII     |                    |                                  |              |    |         | Capacitances(pF)           | -      | 0.25  | 6<br>per<br>week |
|   | Links to<br>H.P.   | Links to<br>L.P.   | Links to<br>E                    |              |    |         | (i) Cag                    |        |       |                  |
|   | TC1                | 5                  | 1,2,3,4,<br>5,6,7,8,<br>9,10,TC2 |              |    |         |                            |        |       |                  |
|   | 5                  | 1,2,3,4,<br>6,7,8. | 9,10,TC1<br>TC2                  |              |    |         |                            |        |       |                  |
|   | TC1                | 1,2,3,4,<br>6,7,8. | 5,9,10,<br>TC2.                  |              |    |         | (iii) Cae                  | 5.5    | 10.0  |                  |
| b | Vf DC              | Va                 | Vg2                              | Vg1          | Vb | Ia (mA) | If (A)                     | 1.0    | 1.2   | 100%<br>or S     |
| c | 2.2                | 250                | 150                              | -            | 0  | 25      | Vg1 (V)                    | -7.5   | -12.5 | 100%             |
| d | 2.2                | 250                | 150                              | -            | 0  | 25      | Ig2 (mA)                   | -      | 5.0   | 100%             |
| e | 2.2                | 250                | 150                              | -            | 0  | 25      | Rev. Ig ( $\mu$ A)         | -      | 2.0   | 100%             |
| f | 2.2                | 250                | 150                              | as in<br>'e' | 0  | -       | Ia change (mA)<br>Note 1   | 11.5   | -     | 100%             |
| g | 2.2                | 250                | 250                              | -45          | 0  | -       | Ia (mA)                    | -      | 1.0   | 100%<br>or S     |
| h | 2.2<br>AC or<br>DC | 250                | 250                              | +100         | 0  | -       | Peak Ia+Ig2 (mA)<br>Note 2 | 750    | -     | 100%             |

NOTES

- Note change in Ia when Vg1 is increased by +4 volts.
- The grid swing to be applied as intermittent pulse of suitable duration and recurrence. During off period valve to be biased beyond cut-off.