

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

| | | |
|---|------------------------------------|------------------------------|
| Specification: MOS/CV26/Issue 4 Dated: 2.5.47 To be read in conjunction with K1001, ignoring clauses 5.2,5.8 & 7.2 | <u>SECURITY</u> | |
| | <u>Specification</u> Restricted | <u>Valve</u> Unclassified |

→ indicates a change

| | | | |
|---|--------|---------------------|---------------------|
| <u>TYPE OF VALVE:-</u> R.F. beam power amplifier | | <u>MARKING.</u> | |
| <u>CATHODE:-</u> Directly heated | | See K1001/4 | |
| <u>ENVELOPE:-</u> Glass - unmetallised | | | |
| <u>PROTOTYPE:-</u> 813 | | | |
| | | | |
| <u>RATING.</u> | | <u>BASE</u> USG7 | |
| | | Note | |
| Filament voltage | 10.0 | Pin | Electrode |
| Filament current (A) | 5.0 | 1 | Filament |
| Max. Anode voltage | 2000 | 2 | No connection |
| Max. Anode dissipation (W) | 100 | 3 | Screen grid |
| Max. Screen voltage | 400 | 4 | Control grid |
| Max. Screen dissipation (W) | 15.0 | 5 | Beam forming plates |
| Max. frequency for above ratings (Mc/s) | 30 | 6 | No connection |
| Anode current (mA) | 50 A | 7 | Filament |
| Max. screen current (mA) | 3.0 A | TC | Anode |
| Mutual conductance (mA/V) | 3.75 A | <u>TOP CAP</u> | |
| <u>CAPACITANCES (pF)</u> | | See K1001/AI/D5.5 | |
| Cag ₁ (Max) | 0.2 | <u>DIMENSIONS</u> | |
| Cac | 14.0 | See K1001/AI/DL | |
| Cg _{1e} | 16.3 | | |
| <u>NOTES</u> | | Dimension. | Min. |
| A. Measured at Va=2000, Vg ₂ =400, Ia=50mA | | A mm | 178 |
| | | B mm | - |
| | | C mm | - |
| | | F mm | - |
| | | | Max. |
| | | | 191 |
| | | | 66 |
| | | | 55.5 |
| | | | 164 |

TESTS

To be performed in addition to those applicable in K1001

| Test Conditions | | | | | Test | Limits | | No. Tested | |
|------------------|------------------|---|-----------------|-----------------|-----------------------|--------------------------------------|------|------------|-----------|
| | | | | | | Min. | Max. | | |
| a See K1001/AIII | | | | | Capacitance (pF) | | | | |
| Links to H.P. | Links to L.P. | Links to E. | | | | | | | |
| TC ₁ | 4 | 1, 2, 3, 5, 6, 7, 8, 9, 10, TC ₂ | | | | | | | |
| 4 | 1, 2, 3, 5, 6, 7 | 8, 9, 10, TC ₁ , TC ₂ | | | | | | | |
| TC ₁ | 1, 2, 3, 5, 6, 7 | 4, 8, 9, 10, TC ₂ | | | (i) Cag ₁ | - | 0.2 | T.A. | |
| | | | | | (ii) Cg _{1e} | 13.0 | 19.6 | 6 | |
| | | | | | (iii) Cae | 10.5 | 17.5 | per week | |
| | V _f | V _a | V _{g2} | V _{g1} | I _a (mA) | | | | |
| b | 10.0 | - | - | - | - | I _f (A) | 4.7 | 5.3 | 100% or S |
| c | 10.0 | 2000 | 400 | - | 50 | V _{g1} (V) | -33 | -47 | 100% |
| d | 10.0 | 2000 | 400 | - | 50 | I _{g2} (mA) | - | 3.0 | 100% |
| e | 10.0 | 2000 | 400 | Vary | 50 | g _m (mA/V) (Note 2) | 3.0 | 4.5 | 100% |
| f | 10.0 | 2000 | 400 | - | 75 | Rev. I _g (μA) (Note 3) | - | 10 | 100% |
| g | 10.0 | 2000 | 400 | -80 | - | I _a (mA) cut off. | - | 2.0 | 100% |
| h | 10.0 | 750 | 750 | 750 | - | I _e (A) (Note 4) | 2.5 | - | 100% |

NOTES

1. Tests b to h inclusive measured with A.C. filament heating, centre point earthed.
2. Vary V_{g1} + 2 volts from mean.
3. Measurement made after 3 mins. run.
4. See K1001/AV.