| Specification MAP/CV92/Issue 4. | SECURITY | | | |
|--|----------------------|--------------|--|--|
| Dated 18.1.50. To be read in conjunction with K1001 | <u>Specification</u> | <u>Valve</u> | | |
| ignoring clause: - 5.2. | RESTRICTED | UNCLASSIFIED | | |

| | Indicates | a change |
|-------------|-----------|----------|
|-------------|-----------|----------|

| Indicates a change | | | | | | |
|---|----------------------|--------------------------------|----------------------|-------------------------------|--|--|
| TYPE OF VALVE - Triode with forced air- cooled anode. CATHODE - Indirectly heated, oxide coated. ENVELOPE - Metal glass construction. | | <u>MARKING</u> See K1001/4. | | | | |
| | | | PACKING See K1005 | | | |
| | | | BASE None | | | |
| RATING | | | Note | DIMENSIONS and CONNECTIONS | | |
| Heater Voltage Heater Current | (V) (A) (A) | 6.0 6.5 | | See drawing on page 3 | | |
| Max. Peak Anode Voltage (kV) Max. Anode Dissipation (W) Amplification Factor Average Grid Voltage (V) | | 8.0 150 22 -31 | B C | | | |
| Efficiency of pa Wavelengths of Absolute Min. Wa of Operation | Operation of 50 cms. | 40% 40 | | | | |
| CAPACITANCES (pf |) | | | | | |
| Cag Cge Cae | | 8.0 11.0 2.25 | | | | |

NOTES

- A The valve shall be processed so that it will withstand H.T. switching in two stages, viz:- first to half Va then to full Va, when operated in a push-pull oscillator circuit modulated by a pulse of length 1.0 μ.sec., with repetition frequency 500 per sec. and with Va not greater than 8.0 (KV).
- B During testing and operation the air-cooled surface of the anode must be maintained below 140°C. A blast of air blown on to the anode diffuser at the rate of at least 5 cu. ft./min. and on to the grid seal at the rate of approx. 1 cu.ft./min. is suggested.
- C At Va = 1kV, Ia = 100 mA.

CV92

TESTS

To be performed in addition to those applicable in K1001.

| | T | est Conditi | ons | Test Limits | | its | No. | |
|---|------------------|--|---------------------------------|--|------------------------|---------|--------------|-----|
| | Vr | Va | Ia(mA) | Test | Min. | Max. | Tes- N | ote |
| a | 6.0 | 0 | 0 | Ih(A) (A) | 5.85 | 7.15 | 100% | |
| Ъ | 6.0 | 1000 | 100 | ν _g (ν) | - 19 . 0 | -43.0 | 100% | |
| С | 6.0 | 1000 | 100 | Reverse Ig (μA) (gas) | - | 10 | 100% | 1 |
| đ | 6.0 | 1000 | 100 | Reverse Ig (Emission Current) (mA) | . - | 10 | 100% | 1 |
| е | 6 . O | 500 | 100 | 1. Vg Must not be 2. Change in Vg from value | | | | |
| | | | | noted in (b). | 17 | 29 | 100% 100% | |
| f | 6,0 | Anode and grid strap- ped Peak applied vol- tage 1.5 kV. tp = 2µsecs. PRF = 50/sec. Pulse shape sinu- soidal | | Peak emission (A) | 40 | | 100% | |
| g | Type 111 | Measured using adaptor Type 111 Ref. 10A/19297 See K1001/A.III | | | | | | |
| | Links to H.P. | Links to L.P. | Links to E | CAPACITANCES (pF) | | | | |
| | 2 | 3 | 1,4,5,6 7,8,9,10 TF1, TC2 | Cag | 6.0 | 10.0 | T.A. | |
| | 3 | 1 | 2,4,5,6 7,8,9,10 TCl, TC2 | Cge | 8• 25 | 13•75 | | |
| | 2 | 1 | 3,4,5,6 7,8,9,10 TC1, TC2 | Cae | 1.5 | 3.0 | | |

Note

The gas component of the negative Ig can be taken as the immediate decrease in negative current when Vg is rapidly increased to cutoff value. The presence of unsaturated grid emission may render test "o" impossible.

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