

ADMIRALTY SIGNAL ESTABLISHMENT

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|---|-----------------------------|-------------------------------|
| Specification AD/CV1280 Issue No. 3. Dated 11/6/47. To be read in conjunction with K1001. | <u>SECURITY</u> | |
| | <u>Specn.</u> Restricted | <u>Valve.</u> Unclassified |

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|--|-------------------------|------------------------------|------|
| <u>TYPE OF VALVE:-</u> Variable Mu Heptode Mixer. <u>CATHODE:-</u> Indirectly heated. <u>ENVELOPE:-</u> Glass - unmetallised. <u>PROTOTYPE:-</u> X64. | <u>MARKING</u> | | |
| | See K1001/4. | | |
| | <u>BASE</u> | | |
| | IO See K1001/AIV/D2. | | |
| <u>RATING</u> | Pin | Electrode | |
| Heater Voltage (V) 6.3 | 1 | No connection. | |
| Heater Current (A) 0.3 | 2 | Heater. | |
| Max. Anode Voltage (V) 250 | 3 | Anode. | |
| Max. Screen Voltage (V) 150 | 4 | Screen grid (G2, G4). | |
| <u>Operating Conditions</u> | 5 | Osc. grid (G3). | |
| Anode Voltage (V) 250 | 6 | Pin omitted. | |
| Screen Voltage (V) 150 | 7 | Heater. | |
| Control grid voltage (V) -6 | 8 | Cathode and suppressor (G5). | |
| Mixer grid voltage (V) 15 D.C. | TC | Control grid (G1). | |
| Peak Oscillator Voltage (V) 18 | | | |
| Total Cathode Current (average) (mA) 12 | | <u>TOP CAP</u> | |
| Average Conversion Conductance (μmhos) 310 | | See K1001/AI/D5.2. | |
| Conversion Impedance (MΩ) 1.0 | | <u>DIMENSIONS</u> | |
| | | See K1001/AI/D1. | |
| <u>CAPACITANCES (pF).</u> | Dimension | Min. | Max. |
| Cg1-g3 0.26 | A mm | - | 114 |
| Cg1-a 0.17 | B mm | - | 39 |
| Cg1-all 6.0 | | | |
| Cg3-all 11.25 | | | |
| Ca-all 8.5 | | | |
| Cg3-a 1.0 | | | |
| | <u>PACKING</u> | | |
| | See K1001/7. | | |

TESTS

To be performed in addition to those applicable in K1001.

| | Test Conditions | | | | | | Test | Limits | | No. Tested | Note |
|---|-----------------|-----------|------------|------------|------------|------------|---|--------|------|--------------|------|
| | Vh (V) | Va (V) | Vg1 (V) | Vg2 (V) | Vg3 (V) | Vg4 (V) | | Min. | Max. | | |
| a | 6.3 | | | | | | Ih (A) | 0.27 | 0.33 | 100% or 3 | |
| b | 6.3 | 250 | -6 | 150 | -15 | 150 | Ie (mA) | 8.9 | 16.1 | 100% | 1 |
| c | 6.3 | 250 | -6 | 150 | -15 | 150 | Conversion con- ductance ($\mu\text{A/V}$) | 200 | 420 | 100% | 1 |
| d | 6.3 | 250 | -6 | 150 | -15 | 150 | Reverse Ig1 (μA) | - | 1.0 | 100% | 1 |
| e | 6.3 | 250 | -4.5 | 150 | -15 | 150 | Ia tail (mA) | - | 0.75 | 100% | 1 |

NOTES

1. 18 V peak A.C. superimposed on Vg3.