VALVE ELECTRONIC CV79

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

Specification MOS/CV79/Issue 8 Dated 11.3.46 To be read in conjunction with K.1001 ignoring clause 5.3.	SECURITY Specification: ~~Restricted~~ Unclassified Valve: ~~Restricted~~ Unclassified ←

→ indicates a change

TYPE OF VALVE:- Magnetron CATHODE:- Indirectly heated ENVELOPE:- Glass PROTOTYPE:- E.1429	MARKING See K1001/4

RATING			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	0.2	
Max. Anode Dissipation	(W)	8.5	
Magnetic Field Strength (approx)	(H)	650	
Frequency	(Mc/s)	4547	
Nominal Output	(mW)	200	

BASE
B9G

Pin	Electrode
1	Heater
2	No Connection
3	Anode
4	No Connection
5	No Connection
6	Cathode & Heater
7	No Connection
8	Anode
9	No Connection

DIMENSIONS
See K1001/AI/D2 and page 3.

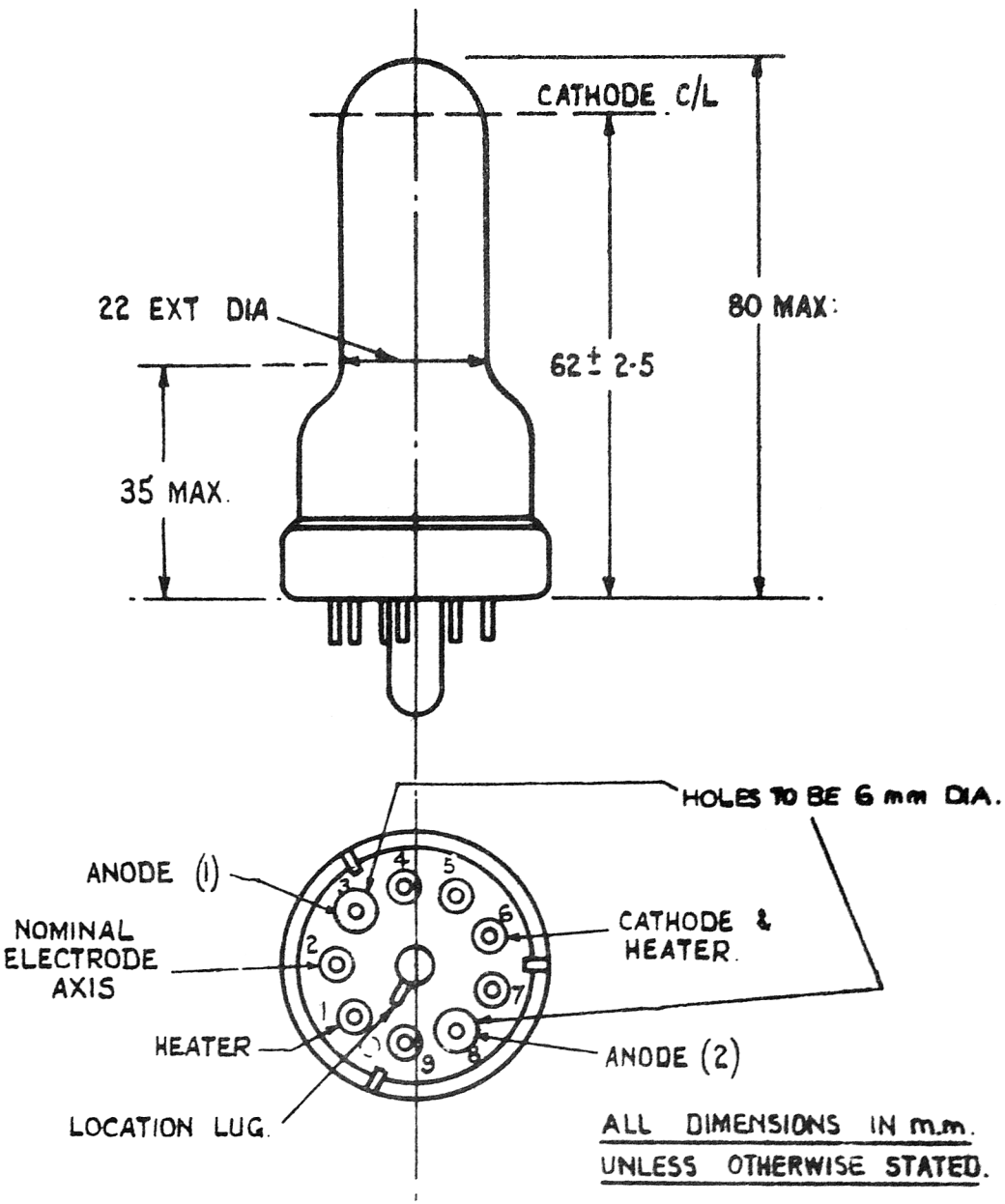
TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions		Test	Limits		No. Tested
	Vh	Ia(mA)		Min.	Max.	
a	6.3	-	Ih (A)	0.15	0.25	100% or S
b	6.3	12 (Note 5)	Frequency (Mc/s)	4630	4465	100%
c	6.3	12 (Note 5)	Output (mW)	100	-	100%
d	The valve must function in the Wireless Set No.10, according to the approved MOV test schedule.					

NOTES

1. Tests b and c are to be made on the valves when oscillating in an R.F. oscillator which is a replica of the oscillator unit of Wireless Set No.10. The valve shall be symmetrically disposed and normal to the axis of the magnets.
2. The output load to consist of a length of approximately 20 metres of Uniradio No.21 cable terminating in a G.E.C. design crystal detector which approximately matches the cable. The D.C. output of the crystal is fed to a milliammeter.
3. The magnet system to be assembled with position of fixed magnet arranged so that with the adjustable magnet at two turns out a field of 670 oersteds is obtained in the centre of the gap.
4. The adjustable magnet is to be set to give 650 oersteds (approx. 3 turns out).
5. The tests are to be made with the D.C. H.T. supply adjusted to give 12 mA after adjustment of tilt.
6. The resonator piston in the oscillator unit is to remain at the full-in position.
7. The line piston and magnetron tilt are adjusted for maximum crystal current and the adjustable magnet moved to a maximum of $\pm \frac{1}{2}$ a turn if necessary, to bring the frequency within specified limits. The power output and frequency are then measured.
8. The reading of the milliammeter connected to the load crystal is converted to milliwatts by reference to a calibration of the crystal and cable against a bolometer.



ALL DIMENSIONS IN m.m. UNLESS OTHERWISE STATED.

EXTERNAL VIEW.