VALVE ELECTRONIC **CV62**

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

Specification MOS/CV62/Issue 4 Dated:- 29.9.48 To be read in conjunction with K1001 ignoring clauses 5.2, 5.8 and 7.2	SECURITY	
	Specification	Valve
	Restricted	Unclassified

→ indicates a change

TYPE OF VALVE:- Triode CATHODE:- Directly heated thoriated tungsten ENVELOPE:- Metal-glass construction	MARKING As in K1001/4, ignoring all reference to a frame. Additional marking:- Serial No....

RATING			Note	BASE
				None
Filament voltage	(V)	8.25		DIMENSIONS AND CONNECTIONS
Filament current	(A)	7.0		
Max. anode voltage	(kV)	9.0		
Max. anode dissipation	(W)	100	B	See drawing page 3
Amplification factor		16	A	
Max. operating frequency	(Mc/s)	300		

NOTES

A. At Va = 1.0 kV, Ia = 100 mA.

B. Forced air cooling must be provided so that the temperature of the anode radiator does not exceed 140°C, measured at the junction of the anode and the cooling fins. A suitable airflow is approximately 8 cu. ft. per minute with a pressure drop across the valve of the order of 1½ inches of water. Forced air cooling must be applied before the filament is switched on.

C. The valve must be mounted vertically.

D. The attention of equipment designers is drawn to the fragility of the valve seals, and consequently special care should be exercised in the mechanical design of associated circuits.

TESTS

To be performed in addition to those applicable in K1001

	Test Conditions (See Note B Page 1)				Test	Limits		No: tested
	Vf	Va	Vg	Ia (mA)		Min.	Max.	
a	See K1001/AIII				Direct Capacitance Cag (pF) Cge "	3.0 1.5	4.5 2.9	1% (1)
b	8.25 AC	Raised slowly to 10kV and maintained till flashing ceases (Note 1)	Preferably auto-matic bias	Any value between 0.5 and 3.0	Hot Flash Process Anode voltage maintained at 10kV for a period of 2 mins. during which time valve shall show no signs of breakdown			100% (Note 1)
c	8.25 AC	-	-	-	If (A)	6.4	7.6	100%
d	8.25 AC	1000	Read	100	Vg	-19	-31	100%
e	8.25 AC	700	Read	100	Change in Vg from value in (d)	14	22	1% (1)
f	8.25	Strapped. Peak applied voltage 1500 volts. Test to be performed by an approved method		-	Peak space current (A)	7	-	5%
g	-	1000	0	10	Vf (V)	-	3.5	100%
h	8.25 AC	1000	-	100	Rev. Ig (μA)	-	10	100%
j	8.25 AC	0	-3000	-	Rev. Ig (μA)	-	20	100%
k	8.25	Read	-104	4	Va (V)	1325	1700	100%

Note 1. Once the conditions specified in Test Clause (b) have been met, the test conditions need not be repeated for acceptance testing. For this hot flash process there shall be a 500 ohm resistor in series with the applied voltage, and a capacitance of 0.15μF in parallel with the supply voltage on the supply side of the resistor.

Note 2. If 100% tests are done under (f), (g) may be omitted.

Note 3. The following alternative test to (h) may be made:- Under conditions of (g) increase Vf to 9.25 V. Ig must not exceed 10μA.

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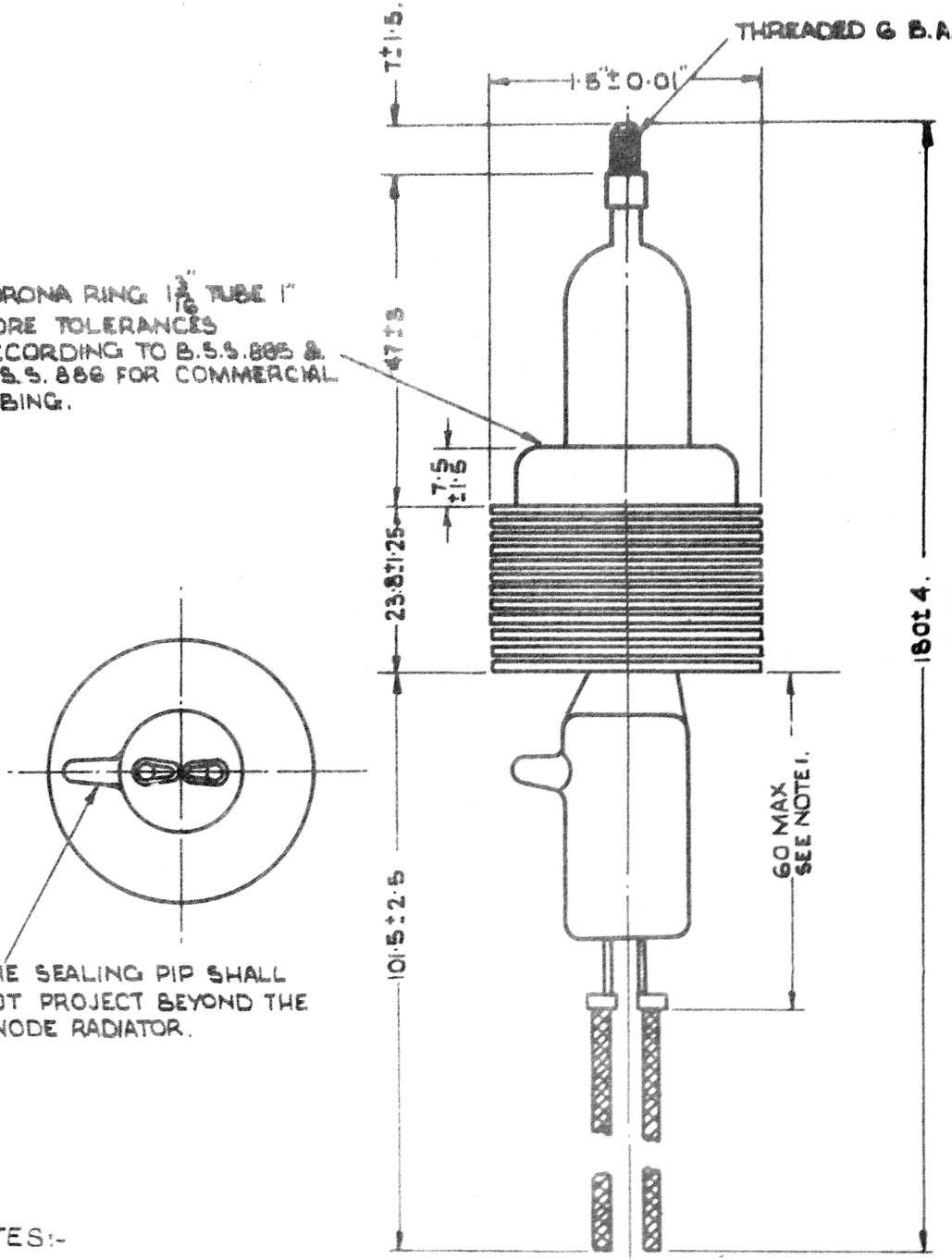

NOTES:-

1. THIS DIMENSION SHALL INCLUDE ANY RIGIDITY OF THE FILAMENT LEADS DUE TO THE SPREAD OF SOLDER FROM THE CONNECTIONS WITH THE TUNGSTEN LEAD OUT WIRES.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.