

MINISTRY OF SUPPLY, D.L.R.D./R.A.E.

SPECIFICATION MOS/CV1069 ISSUE NO. 7 DATED 14.9.59 To be read in conjunction with K1001 & BS1409	<u>SECURITY</u>	
	<u>SPECIFICATION</u> Unclassified	<u>VALVE</u> Unclassified

→ Indicates a change

TYPE OF VALVE:- Voltage Stabiliser CATHODE:- Cold ENVELOPE:- Glass unmetallised PROTOTYPE:- STV 280/80		<u>MARKING</u> See K1001/4		
<u>RATINGS</u>		NOTES	<u>BASE</u> B5 See K1001/AIV/Drg 5.2	
Max. Striking Voltage (V)	363		<u>CONNECTIONS</u>	
Max. Cathode Current (mA)	80		PIN	ELECTRODE
<u>Nominal Operating Voltage at I_k = 40 mA</u>			1	Anode 4 a4
Anode 1 - Cathode (V)	73		2	Cathode k
Anode 2 - Cathode (V)	143		3	Anode 2 a2
Anode 3 - Cathode (V)	205		4	Anode 3 a3
Anode 4 - Cathode (V)	282		5	Anode 1 a1
			<u>DIMENSIONS</u> See K1001/A1/Drg 1	
		DIMENSIONS	MIN	MAX
		"A" Overall length	-	150
		"B" Diam.	-	63
		<u>Packaging</u> K1001/4		

To be performed in addition to those applicable in K1001.

The valve, unless otherwise stated, shall be tested in the circuit shown in Fig.1. Should the valve fail in any of the following tests, it shall be retested after a period of 15 minutes operation at $I_k = 80$ mA.

Test	Test Conditions	Insp. Level	Symbol	Limits		Unit
				Min	Max	
Va 4 Strike Voltage	The applied voltage to be increased from zero until current flows.	100 %	Vs	-	363	V
Operating Voltages	Current through A = 40 mA. After 15 minutes operation the running voltages to be measured. 1) Va 1 2) Va 2 3) Va 3 4) Va 4	100 %	Va 1	60	87	V
			Va 2	120	167	V
			Va 3	185	226	V
			Va 4	250	314	V
Impedance	Record Va 3 with current through A adjusted for a) 80 mA, b) 20 mA and c) 10 mA. 1) Va 3 @ 80 mA - Va 3 @ 10 mA. 2) Va 3 @ 20 mA - Va 3 @ 10 mA.	100 %	Va 3	-	14	V
			Va 3	-	2	V
Noise		100 %				

A calibrated amplifier detector having a substantially uniform response over the range 50 - 5000 c.p.s. shall be connected between A_k and the cathode. The current through A shall be varied from 10 mA to 80 mA. At no point in the range shall the noise input to the amplifier exceed 100 mV r.m.s.

NOTES.

FIG.1.

Circuit Drawing

A = LOW RESISTANCE MILLIAMETER
R1 = R2 = R3 = 100K Ω.

