

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

Specification MOS/CV2225/Issue 4 Dated:- 10.3.53 To be read in conjunction with K1001 ignoring clause 5.2		<u>SECURITY</u> <u>Specification</u> <u>Valve</u> Unclassified Unclassified																	
→ indicates a change																			
<u>TYPE OF VALVE:</u> Gas-filled voltage stabiliser <u>CATHODE:</u> Cold <u>ENVELOPE:</u> Glass unmetallised <u>PROTOTYPE:</u> 150B2		<u>MARKING</u> See K1001/4																	
<u>RATING</u>		<u>BASE</u> B7G																	
Max. Striking Voltage (V) 180 Mean Voltage Drop Across Valve operating at 10 mA (V) 150 Operating Current (mA) 10 Min. Cathode Current (mA) 5 Max. Cathode Current (mA) 15 A.C. Resistance at 10 mA (ohms approx.) 250 Ambient Temp. Range (°C) -55 +90		<u>CONNECTIONS</u> <table><tr><th>Pin</th><th>Electrode</th></tr><tr><td>1</td><td>Anode</td></tr><tr><td>2</td><td>Cathode</td></tr><tr><td>3</td><td>Internal Connection</td></tr><tr><td>4</td><td>Internal Connection</td></tr><tr><td>5</td><td>Internal Connection</td></tr><tr><td>6</td><td>Internal Connection</td></tr><tr><td>7</td><td>Internal Connection</td></tr></table>		Pin	Electrode	1	Anode	2	Cathode	3	Internal Connection	4	Internal Connection	5	Internal Connection	6	Internal Connection	7	Internal Connection
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		<u>DIMENSIONS</u> See K1001/A1/D4																	
		<u>Dimensions</u>	<u>Min.</u> <u>Max.</u>																
		A mm.	54																
		B mm.	19																

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits		No. Tested
			Min	Max	
a	With a resistor of 5,000 ohms in the anode circuit, increase the applied voltage until current flows.	Striking Voltage (V)	-	180	100%
b	Before making the following tests run the valve for 3 minutes with the cathode current adjusted to 10 mA.	Output Voltage (V)	146	154	100%
	Cathode current at 10 mA.				
c	Cathode current varied from 5 mA to 15 mA	Output Voltage Change (V)		5	100%
d	During this operation the valve shall be tested for freedom from noise with a calibrated amplifier-detector, having a substantially linear response over the range 50 to 5,000 c.p.s. connected between the anode and cathode. The noise input voltage must not exceed 250 mV peak to peak at any point with the cathode current varied from 5 mA to 15 mA.				100%
e	<u>Voltage Stability During Life</u> With the valve set up to operate under normal conditions at $I_c = 10$ mA the maximum percentage variation of the stabilised voltage during a period of 2,000 hrs. shall not exceed $\pm 1\%$. This test may, if desired, be made on valves undergoing normal factory life tests and examination of the records of such tests will normally be considered to fulfil the requirements of this test clause.				