

MINISTRY OF SUPPLY (D.L.R.D.(A)) R.A.E.

Specification MOSA/CV2265 Issue 2 Dated 28.5.54 To be read in conjunction with K.1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

—————→ Indicates a change

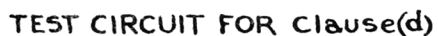
TYPE OF VALVE - Gas Filled Diode		<u>MARKING</u> See K.1001/4.4. Each valve shall be marked with the number CV2265, the date code, and if possible the factory identification code. A red spot shall indicate the anode.										
CATHODE - Cold												
ENVELOPE - Glass												
PROTOTYPE - VX.9077												
<u>RATING</u>		Note	<u>BASE</u> Flying Leads See Drawing on Page 3									
Nominal Striking Voltage (V)	120		<u>CONNECTIONS</u> See Drawing on Page 3									
			<u>DIMENSIONS</u> See Drawing on Page 3									
			<table><tr><td>Dimension</td><td>Min.</td><td>Max.</td></tr><tr><td>Length m.m.</td><td>25</td><td>29</td></tr><tr><td>Diameter m.m.</td><td>7.0</td><td>8.5</td></tr></table>	Dimension	Min.	Max.	Length m.m.	25	29	Diameter m.m.	7.0	8.5
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<u>WARNING NOTE</u> In view of the Radio Active Materials used in the construction of these valves, great care should be taken in the handling of same, especially where breakages occur.												

To be performed in addition to those applicable in K.1001.

Test Conditions			Limits		No. Tested	Note
			Min.	Max.		
FINAL ACCEPTANCE TESTS ON THESE VALVES SHALL NOT BE PERFORMED UNTIL 4 WEEKS AFTER MANUFACTURE						
a	<u>Electrical Leakage Test</u> Va - c = 115 D.C. Volts	Ia (μA)	-	0.01	100%	1,2.
b	(1) Tested with a Waveform having low rate of rise (2 kV/sec ± 2%)	Striking Voltage (V)	123.2	128.2	100%	1,2, 3,5.
	(2) Tested with a Waveform having low rate of rise (2 kV/sec ± 2%)	Striking Voltage Scatter (Related to the Striking Voltage measured in b(1) above)	-0.4	+0.4	100%	1,2, 3,5.
	(3) Tested with a Waveform having low rate of rise (2 kV/sec ± 2%)					
c	Tested with a Waveform having high rate of rise (16 kV/sec ± 2%)	Slope of Striking Voltage Characteristic V/(kV/sec) ^{1/2}	1.15	1.75	100%	1,2,5.
d	Tested in circuit as shown on Page 3, or by means of the RAE extinction voltage test gear	Extinction Voltage Test (V)	-	70	2%	1,6.
e	See Note 4	Shock Test	To be determined		2%	4.

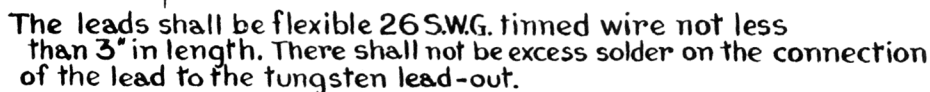
NOTES

- All tests shall be performed with the valve enclosed in an approved light proof container.
- These tests shall be performed with equipment approved by the Design Authority.
- The intervals between tests b(1), (2) and (3) shall be not less than 1 sec. duration.
- This test shall be performed in equipment approved by the Design Authority. Samples subjected to this treatment will be re-tested to clauses a, b, c, and d, to determine the effect of the shock.
Valves subjected to this test shall not be supplied as part of any contract.
- Measured with a load resistance of 100 kΩ.
- There is in existence an approved type of test gear designed for measuring Extinction Voltage which is described in R.A.E. Technical Note EL.21.



The input voltage is increased until the diode strikes. At the instant after striking, the voltage remaining across the capacitor C shall not exceed 70V.

The insulation resistance of capacitor C in parallel with voltmeter V shall be not less than 10^9 ohms.



The centre of the end of each tungsten lead-out shall be within 0.5 mm. of the envelope axis.

The seals shall be of reasonably uniform shape. If "necked" seals are produced as shown by dotted profile, the diameter of the neck shall be not less than 3 mm.