

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

Specification MOS(A)CV.474 Issue 4 Dated 17.7.57 To be read in conjunction with BS.1409 and K.1001 excluding clauses: 5.2; 5.8	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

—————> Indicates a change

TYPE OF VALVE - Gas-filled Tetrode CATHODE - Indirectly Heated ENVELOPE - Glass, unmetallised PROTOTYPE - VX.9012, 8033	<u>MARKING</u>  See K.1001/4 CV number, T.A. letters, Factory and Date code, only required.
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<u>RATINGS</u>			<u>BASE</u>  B.8.D.																		
		Note	<u>CONNECTIONS</u>																		
			<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Pin</th> <th style="width: 50%;">Electrode</th> </tr> </thead> <tbody> <tr><td>1</td><td>a</td></tr> <tr><td>2</td><td>g2</td></tr> <tr><td>3</td><td>h</td></tr> <tr><td>4</td><td>g2</td></tr> <tr><td>5</td><td>k</td></tr> <tr><td>6</td><td>h</td></tr> <tr><td>7</td><td>g1</td></tr> <tr><td>8</td><td>g2</td></tr> </tbody> </table>	Pin	Electrode	1	a	2	g2	3	h	4	g2	5	k	6	h	7	g1	8	g2
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			<u>DIMENSIONS</u> See Drawing on Page 3.																		
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A m.m.	-	38																			
B m.m.	9.3	10.16																			
			<u>MOUNTING POSITION</u>  Any																		

NOTES

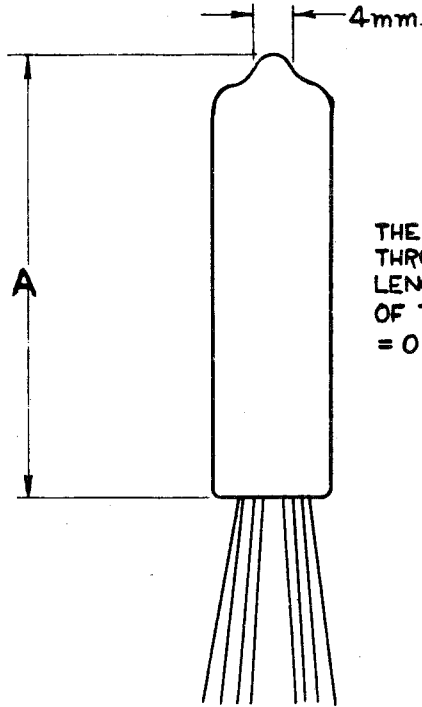
- A. Minimum cathode heating time = 10 seconds.
- B. Heater negative with respect to cathode.
- C. Heater positive with respect to cathode.
- D. Absolute Value.

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

	Test Conditions				Test	Limits		No. Tested	Note
	Vh	Va(b)	Vg2	Vg1		Min.	Max.		
a	6.3	0	0	0	Ih (mA)	135	165	100%	
b	6.3	350 V. A.C. 50 c/s rms.  Rg1 = 0.1 MΩ; RL = 50 kΩ. Vg1 increased in +ve direction until valve conducts	0	Sufficiently negative to prevent conduction	Vg1 (V)	-1.5	-4.0	100%	1
c	6.3	350 V.A.C. 50 c/s rms.  Rg1 = 10 MΩ; RL = 50 kΩ Vg1 as in test "b".	0	As in test "b"	Vg1 (V)	-	-5.0	100%	1
d	6.3	V.D.C. increase until valve conducts  Rg1 = 0.1 MΩ; RL = 500 Ω	0	0	Va (V)	-	28	100%	1
e	6.3	V.D.C. increase until valve conducts  Rg1 = 10 MΩ; RL = 500 Ω	0	0	Va (V)	-	39	5 per week	1
f	6.3	V.D.C. to give Ia = 20 mA.  Rg1 = 0.1 MΩ; RL = 500 Ω	0	0	Voltage drop across Valve (V)	-	15	100%	1
g	5.5	As in test "f"  Rg1 = 0.1 MΩ; RL = 500 Ω	0	0	Voltage drop across Valve (V)	-	16	100%	1
h		See K.1001/5.3			hk Leakage current (μA)	-	20	100%	

NOTE

1. Pins 2, 4 and 8 connected to Pin 5.



**BULB STRAIGHTNESS TEST**  
THE FINISHED VALVE MUST PASS THROUGH A CYLINDRICAL GAUGE OF LENGTH AT LEAST EQUAL TO THAT OF THE BULB. I.D. OF CYLINDER = 0.4 INCH.

THE LEADS SHALL BE FLEXIBLE 25-27 S.W.G. TINNED WIRE AT LEAST 38mm. IN LENGTH.

