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

VALVE ELECTRONIC

CV474

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

SECURITY	
Specification	Valve
UNCLASSIFIED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Gas-filled Tetrode

CATHODE - Indirectly Heated

ENVELOPE - Glass, unmetallised

PROTOTYPE - VX.9012, 8033

MARKING

See K.1001/4
CV number, T.A. letters, Factory and Date code, only required.

RATINGS			Note
Heater Voltage	(V)	6.3	A
Heater Current	(mA)	150	
Max. Peak Anode Voltage	(V)	500	D
Max. Working P.I.V.	(V)	500	D
Max. Peak Anode Current	(mA)	100	D
Max. Mean Anode Current	(mA)	20	D
Max. Peak Heater/Cathode Voltage	(V)	100	B,D
Max. Peak Heater/Cathode Voltage	(V)	25	C,D
Max. Control Grid Resistance	(MΩ)	10	D

BASE

B.8.D.

CONNECTIONS

Pin	Electrode
1	a
2	g2
3	h
4	g2
5	k
6	h
7	g1
8	g2

DIMENSIONS

See Drawing on Page 3.

Dimension	Min.	Max.
A m.m.	-	38
B.m.m.	9.3	10.16

MOUNTING POSITION

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.

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

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

NOTE

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

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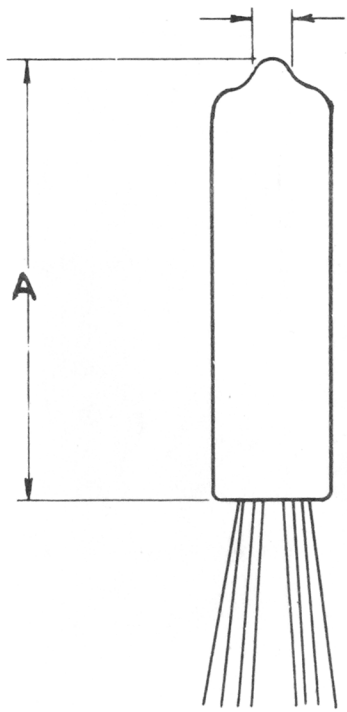

BULB STRAIGHTNESS TEST

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 38 mm. IN LENGTH.