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

VALVE ELECTRONIC

CV474

Specification MOS(A)CV.474
Issue 3 Dated 4.11.55
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.

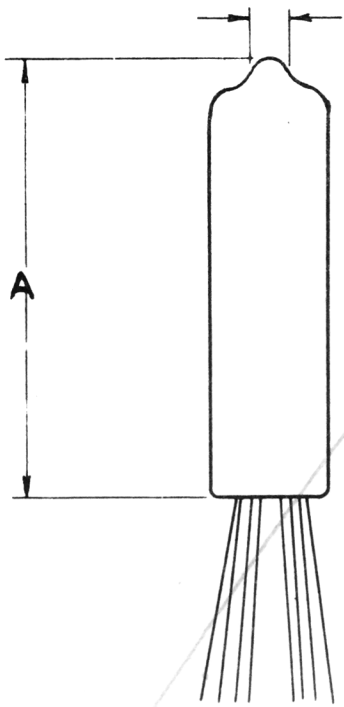
To be performed in addition to those applicable in K.1001.

	Test Conditions				Test		Limits Min.	Limits Max.	No. Tested	Note
	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	Rg1 = 0.1 MΩ RL = 50 kΩ	Va	(V)	-	28	100%	1
→ e	6.3	As in test "d"	0	Rg1 = 10 MΩ RL = 50 kΩ	Va	(V)	-	39	5 per week	1
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 = 50kΩ.								
g	5.5	As in test "f"	0	0	Voltage drop across Valve	(V)	-	16	100%	1
→		Rg1 = 0.1 MΩ; RL = 50 kΩ								
h		See K.1001/5.3			hk Leakage current	(µA)	-	20	100%	

NOTE

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

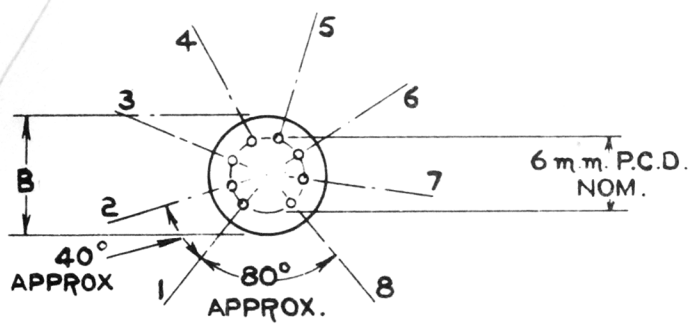
CV474



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.



ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION CV.474.

ISSUE 3 DATED 4.11.55.

AMENDMENT No.1

Page 1

Dimensions Table

Amend the table to read as follows:

Dimensions	Min.	Max.
A m.m.	-	38.00
B m.m.	9.3	10.16

T.V.C. Office for

Director,
Royal Aircraft Establishment.

April, 1957.

N.87689/R