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

VALVE ELECTRONIC

CV468

Specification MOSA/CV.468 Issue 6 Dated 16.10.54 To be read in conjunction with B.S.1409 and K.1001	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Triode Oscillator

CATHODE - Indirectly Heated

ENVELOPE - Glass, unmetallised

PROTOTYPE - VX.8031

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

BASE
B8D

RATING

			Note
Heater Voltage	(V)	6.3	
Heater Current	(mA)	150	
Max. Anode Voltage (Ia = 0)	(V)	350	A
Max. Anode Dissipation	(W)	3.0	
Max. Operating Anode Voltage	(V)	190	A
Mutual Conductance	(mA/V)	4.2	B
Anode Impedance	(Ω)	3600	B
Anode Current	(mA)	13	B
Max. Cathode Current	(mA)	20	
Amplification Factor		20	B

CONNECTIONS

Pin	Electrode
1	g1
2	a
3	h
4	a
5	N.C.
6	h
7	k
8	a

Capacitances (pF) nom.

	Shielded	Unshielded	
C in	1.8	1.7	Nom.
C out	2.8	0.6	Nom.
Cag1	2.1	2.1	Nom.

DIMENSIONS
See Drawing on Page 3

Dimensions	Min.	Max.
A m.m.	-	38.00
B m.m.	9.53	10.16

NOTES

A. Absolute maximum values.

B. Measured at Va = 100V; Vg1 = -2V.

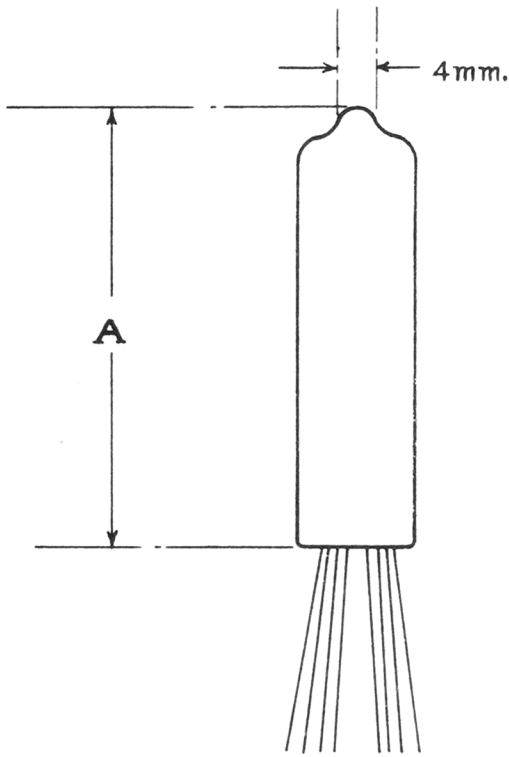
To be performed in addition to those applicable to K.1001

	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested	Note
a	See K.1001/A III				CAPACITANCES (pF)				
	Links to H.P.	Links to L.P.	Links to E.						
	1	3,5,6,7 Sh	2,4,8		C in	1.4	2.2	6 per week	1
	2,4,8	3,5,6,7 Sh	1		C out	2.2	3.4		
	1	2,4,8	3,5,6,7 Sh		Cag1	1.6	2.6		
	Vh	Va	Vg1	Ia					
b	6.3	-	-	-	Ih (mA)	135	165	100% or S	
c	6.3	100	Adjust	8 mA	Vg1 (V)	2.1	3.9	100%	
d	6.3	100	-	8 mA	gm (mA/V)	3.6	4.8	100%	
e	6.3	100	-	8 mA	Reverse Ig (μA)	-	0.7	100%	
f	6.3	~~100~~ See Note 2	-10	-	Ia (μA)	-	50	100%	2
g	6.3	100	See Note 3	8 mA	μ	17	23	20 per week	3

NOTES

1. Capacities measured with close fitting shield.
   Connections refer to valve pins.
   All should be measured at R.F.
2. With an anode supply voltage of 100V applied through a 1 Megohm protective resistance ~~in meter circuit~~ to the anode.
3. Peak Grid swing ± 0.5V. Va adjusted to maintain constant Ia.

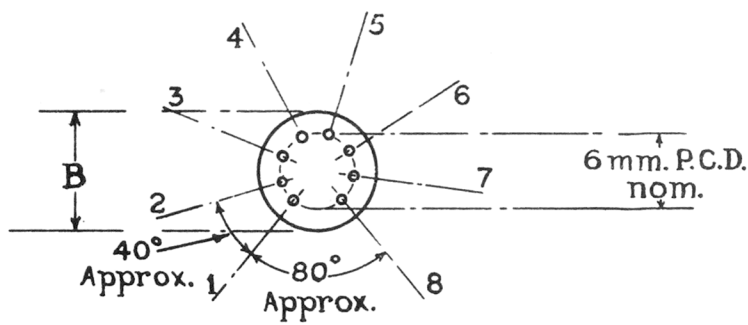
CV468



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.468

ISSUE 6 DATED 16.10.54

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.87690/R

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION CV.468

ISSUE 6 DATED 16.10.54

AMENDMENT NO. 2

Page 2

Test "f". Ia

Under "Va" column delete 100V and substitute "See Note 2".

Amend Note 2 to read:

With an anode supply voltage of 100V applied through a 1 MΩ protective resistance to the anode.

Director,
Royal Aircraft Establishment.

6th August, 1957

N.5055/R