

ELECTRONIC VALVE SPECIFICATION  
SPECIFICATION G.P.O./CV 2323 ISSUE 1  
DATED OCTOBER 1954

AMENDMENT NO.1

2

Test c

Rev.  $I_{1g}$ :- Change the maximum limit from 100 uA to 140 uA.

Test d

Rev.  $I_{2g}$ :- Maximum limit remains at 40 uA.

Gas current

$(I_{1g}-I_{2g})$ :- Maximum limit changed from 70 uA to 100 uA

765)

P.T.O.

Test m

Test Conditions:- Change  $V_a = 8.0$  kV, to  $V_a = 7.5$  kV nominal.

Oscillation Test:- Change  $I_a$  limits to, 2.8A minimum and  
3.0A maximum

Amend Note 5 to read:- Oscillation frequency = 0.5 Mc/s  
 $I_g = 400-500$  mA.  $R_g = 1680$  ohms.

March, 1962

GENERAL POST OFFICE  
E-IN-C (S)

VALVE ELECTRONIC

CV2323

GENERAL POST OFFICE: E-IN-C (S)

Specification: G.P.O./CV.2323 Issue 1, Dated: October, 1954. To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> Unclassified	<u>Valve</u> Unclassified

→ indicates a change

<u>TYPE OF VALVE:</u> Air Blast cooled Triode  <u>CATHODE:</u> Directly heated. Thoriated Tungsten filament <u>ENVELOPE:</u> Copper/glass. Nickel/Iron/Cobalt/alloy. <u>PROTOTYPE B.R.</u> 179.		<u>MARKING</u>	
		See K 1001/4 Additional markings required (See Note B) Serial No..... Filament Volts 6.6	
<u>RATING</u>		N O T E	<u>BASE</u>
			See drawing, page 3.
Filament voltage (V) 6.6 Filament current (nominal) (A) 90.0 Max.direct anode (voltage) (kV) 8.5 Max. anode dissipation (kW) 8.0 Max. grid dissipation (kW) 0.6 Amplification factor 28.0 Mutual conductance (mA/V) 10.0 Peak usable emission (A) 16.0 Max. frequency for above ratings (Mc/s) 100.0 Air flow 475 c/f/minute at a pressure drop of 1.3 inches water gauge		A A	<u>CONNEXIONS</u>
			See drawing, page 3
<u>CAPACITANCE (pF)</u>			<u>DIMENSIONS</u>
			See drawing, page 3
C a g 32.0 C g f 33.0 C a f 1.0			<u>PACKAGING</u>
			See K 1005
<u>NOTES</u>			
A. Measured at $V_a = 5$ kV. $I_a = 1.0$ A. B. It is not essential that the additional markings shall appear within the frame. C. The grid and filament seals require cooling with an air flow of 15 c. ft/min. from a 1" nozzle directed vertically downwards on the valve.			

TESTS

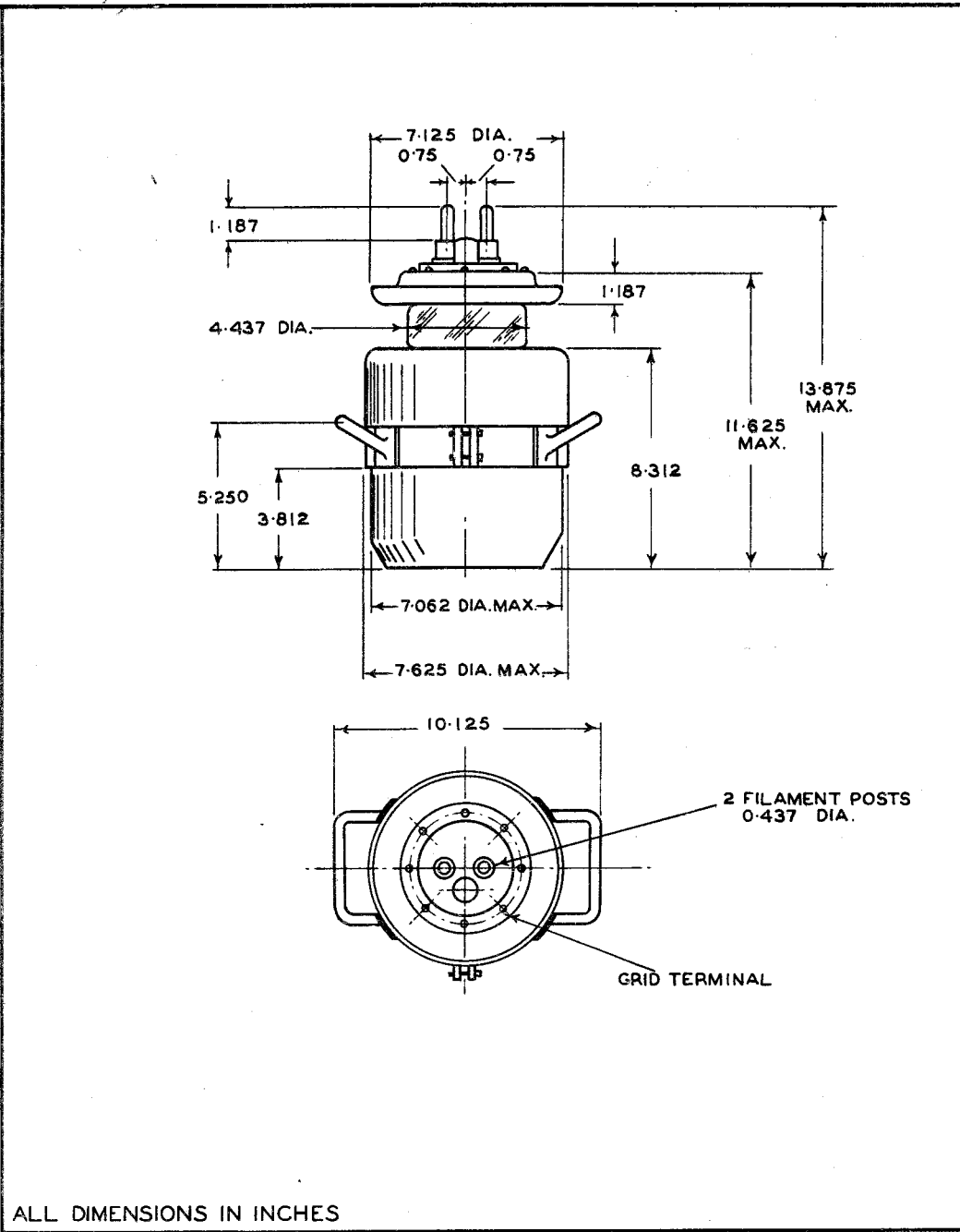
To be performed in addition to those applicable in K 1001

TEST CONDITIONS					TEST	LIMITS		NO. TESTED	NOTE
						MIN.	MAX.		
a	See K 1001/A III				<u>CAPACITANCES (pF)</u> C <sub>ag</sub> C <sub>gf</sub> C <sub>af</sub>	28 28	36 38	10%	
						RECORD			
b	V <sub>f</sub> (V)	V <sub>a</sub> (kV)	V <sub>g</sub> (V)	I <sub>a</sub> (A)					
	6.6	-	-	-	I <sub>f</sub> (A)	83	97	100%	2.
c	6.6	10.0	Adjust	0.9	Rev. I <sub>1g</sub> (μA)	-	100	100%	1.2.
d	6.6	10.0	Adjust	0.1	Rev. I <sub>2g</sub> (μA) Gas current = I <sub>1g</sub> - I <sub>2g</sub> (μA)	-	40 70	100%	2.
e	6.6	10.0	Read	0.1	V <sub>g</sub> (V)	-	-400	100%	2.
f	6.6	5.0	Read	1.0	V <sub>g</sub> (V)	-15	-55	100%	2.
g	6.6	Read	0	1.0	μ	25	32	100%	2.
		Read	-100	1.0					
h	6.6	5.0	Read	1.5	g <sub>m</sub> (mA/V)	7.5	12.5	100%	2.
			Read	0.5					
j	6.6	2.0	+200	Read	I <sub>a</sub> (A) I <sub>g</sub> (A)	2.2 0	3.0 0.3	100%	4.2.
k	6.6	3.0	3000		I <sub>e</sub> (A)	29	-	100%	3.2.
m	6.6	8.0			OSCILLATION TEST				
					I <sub>a</sub> (A)	1.4	1.8	100%	5.2.
n	6.6				Repeat tests c.d.k.	as for tests c. d. k.		100%	2.

NOTES

1. Test c shall be continued for 15 minutes and the value of I<sub>g</sub> shall not be rising at the end of the test. Limit figure of 100 μA refers to reading at end of test.
2. Test to be carried out with the filament heated by 50. c.p.s. current and all circuit returns shall be made to the centre tap on the filament transformer secondary. Air flow of 700 c/f/minute through radiator.
3. Peak emission to be obtained by pulse methods as outlined in K 1001 AV, or by other approved apparatus.
4. Spot readings, or by pulse method.
5. Oscillation frequency 20 Mc/s approx. I<sub>g</sub> = 180-220 mA. R<sub>g</sub> = 2,500 ohms. Oscillate for 20 minutes.

# CV2323



ALL DIMENSIONS IN INCHES