VALVE ELECTRONIC

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

CV2323

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

→ indicates a change

TYPE OF VALVE: Air Blast cooled Triode

CATHODE: Directly heated. Thoriated Tungsten filament

ENVELOPE: Copper/glass. Nickel/Iron/Cobalt/alloy.

PROTOTYPE B.R. 179.

MARKING

See K 1001/4

Additional markings required (See Note B)

Serial No.....

Filament Volts 6.6

RATING			NOTE
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	A
Mutual conductance	(mA/V)	10.0	A
Peak usable emission	(A)	16.0	
Max. frequency for above ratings Air flow 475 c/f/minute at a pressure drop of 1.3 inches water gauge	(Mc/s)	100.0	

BASE

See drawing, page 3.

CONNEXIONS

See drawing, page 3

DIMENSIONS

See drawing, page 3

CAPACITANCE (pF)	
C a g	32.0
C g f	33.0
C a f	1.0

PACKAGING

See K 1005

NOTES

A. Measured at Va = 5 kV. Ia = 1.0A.

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.

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TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS				TEST	LIMITS MIN.	LIMITS MAX.	NO. TESTED	NOTE
a	See K 1001/A III				CAPACITANCES (pF) Cag Cgf Caf	 28 28	 36 38 RECORD	10%	
b	Vf (V)	Va (kV)	Vg (V)	Ia (A)					
	6.6	-	-	-	If (A)	83	97	100%	2.
c	6.6	10.0	Adjust	0.9	Rev. I1g (µA) Amdt 1	-	~~100~~ 140	100%	1.2.
d	6.6	10.0	Adjust	0.1	Rev. I2g (µA) Gas current =I1g-I2g (µA) Amdt 1	-	40 ~~70~~ 100	100%	2.
e	6.6	10.0	Read	0.1	Vg. (V)	-	-400	100%	2.
f	6.6	5.0	Read	1.0	Vg. (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	gm (mA/V)	7.5	12.5	100%	2.
			Read	0.5					
j	6.6	2.0	+200	Read	Ia (A) Ig (A)	2.2 0	3.0 0.3	100%	4.2.
k	6.6	3.0	3000		Ie (A)	29	-	100%	3.2.
m	6.6	~~8.0~~ 7.5 nominal			OSCILLATION TEST Amdt 1 Ia (A)	2.8 ~~1.4~~	3.0 ~~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 Ig 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~~ 30 Mc/s approx. Ig = ~~180-220~~ 400-500 mA. Rg = ~~2,500~~ 1680 ohms. Amdt 1
   Oscillate for 20 minutes.

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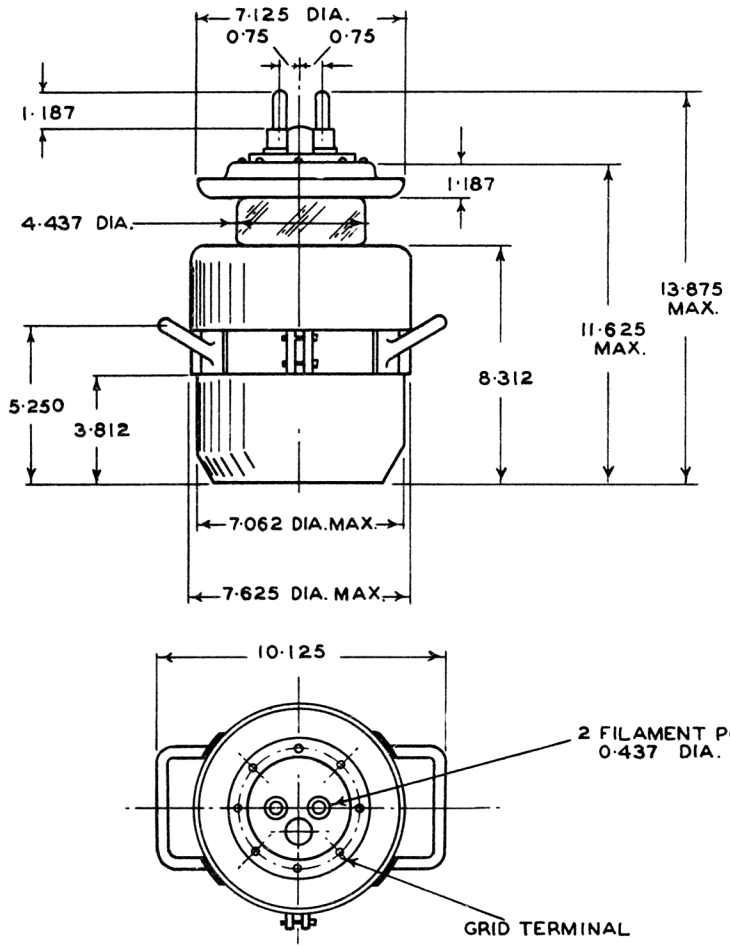

ALL DIMENSIONS IN INCHES

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

AMENDMENT NO.1

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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

(11765) P.T.O.

Test m

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

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

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

March, 1962

GENERAL POST OFFICE
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