

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

VALVE ELECTRONIC

CV 2322

Specification: G.P.O./CV 2322. Issue 1A Dated: May, 1963 To be read in conjunction with K 1001	<div>SECURITY</div> <div> <div>Specification</div> <div>Unclassified</div> </div> <div> <div>Valve</div> <div>Unclassified</div> </div>
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→ 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:</u> BR 161		<u>MARKING</u> See K 1001/4 Additional markings required (See Note C) Serial No. Filament Volts = 9.0.	
<u>RATING</u>		NOTE	<u>BASE</u> See drawing, page 3.
Filament Voltage (V) 9.0 Filament Current (nominal) (A) 175.0 Max. direct anode voltage (kV) 12.0 Max. anode dissipation (kW) 15.0 Max. grid dissipation (kW) 1.0 Amplification factor 45.0 Mutual conductance (mA/V) 23.0 Peak usable emission (A) 45.0 Max. frequency for above ratings (Mc/s) 30.0 Air flow 1,050 c/f/minute at a pressure drop of 1.3 inches water gauge (Mc/s) 50.0		A B D	<u>CONNECTIONS</u> See drawing, page 3.
<u>CAPACITANCE (pf)</u> C _{ag} 36.0 C _{in} 57.0 C _{out} 1.5			<u>DIMENSIONS</u> See drawings, page 3.
<u>PACKAGING</u> See K 1005			
<u>NOTES</u> A measured at V _a = 9 kV, I _a = 2.0A. B measured at V _a = 10 kV, I _a = 1.5A. C It is not essential that the additional markings shall appear within the frame. D In addition to this the grid and filament seals require air cooling with a flow of 20 c.ft./min. from a 1" nozzle directed vertically downwards on to the valve.			

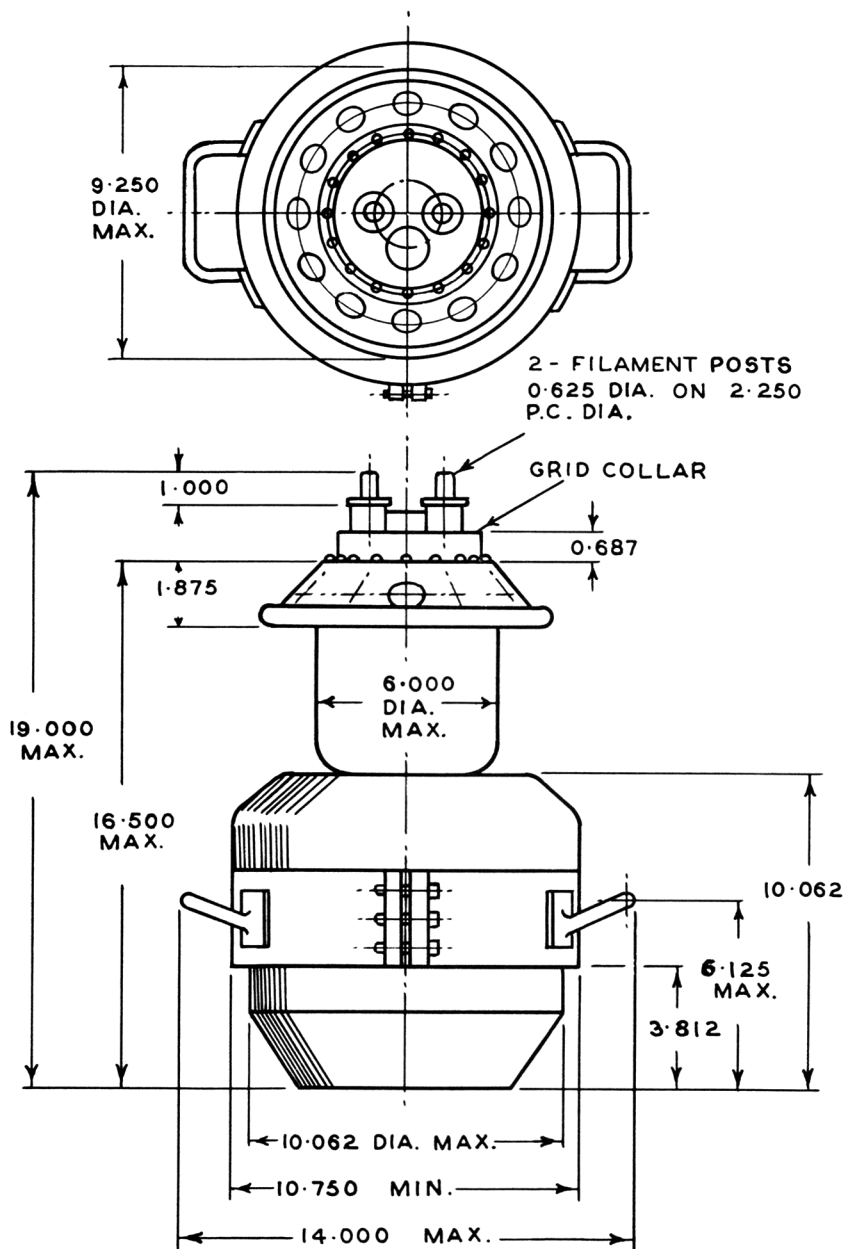
To be performed in addition to those applicable in K 1001

TEST CONDITIONS					TEST	LIMITS		No. TESTED	NOTES
						MIN.	MAX.		
a	See K 1001/APP III				CAPACITANCE (pF) C a g C in	32 50 RECORD	42 62	10%	
b	Vf (V) 9.0	Va (kV) -	Vg (V) -	Ia (A) -	If (A)	163	192	100%	2
c	9.0	12.0	Adjust	2.0	Rev. I1g (μA)	-	230	100%	1.2
d	9.0	12.0	Adjust	0.1	Rev. I2g Gas current = I1g-I2g (μA)	- -	80 190	100%	2
e	9.0	8.0	Read	0.35	Vg (V)	-158	-222	100%	2
f	9.0	10.0 8.0	Read Read	2.0 2.0	μ	37	48	100%	2
g	9.0	10.0	Read Read	1.0 2.0	gm (mA/V)	21.5	29	100%	2
h	9.0	2.0	+ 250	Read	Ia (A) Ig (A)	7.0 0.5	12.0 4.0	100%	4.2
j	9.0	4.0	+ 250	Read	Ia (A) Ig (A)	9.5 0	14.5 2.5	100%	4.2
k	9.0	3.0	3,000		Ie (A)	85	-	100%	3.2
m	9.0				Repeat tests c.d.	as for tests c.d.		100%	2

NOTES

- Test 'c' shall be continued for 15 minutes and the value of Ig shall not be rising at the end of the test.
- Tests 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 2,000 c/f/minute through radiator.
- Peak emission to be obtained by pulse methods as outlined in K 1001AppV or by other approved apparatus.
- Spot readings only, or by pulse methods.

CV2322



ALL DIMENSIONS IN INCHES