VALVE ELECTRONIC

CV445

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

Specification: G.P.O./CV445/Issue 3	SECURITY			
Dated: June, 1956	Specification	<u>Valve</u>		
To be read in conjunction with K 1001	Unclassified	Unclassified		

----> indicates a change

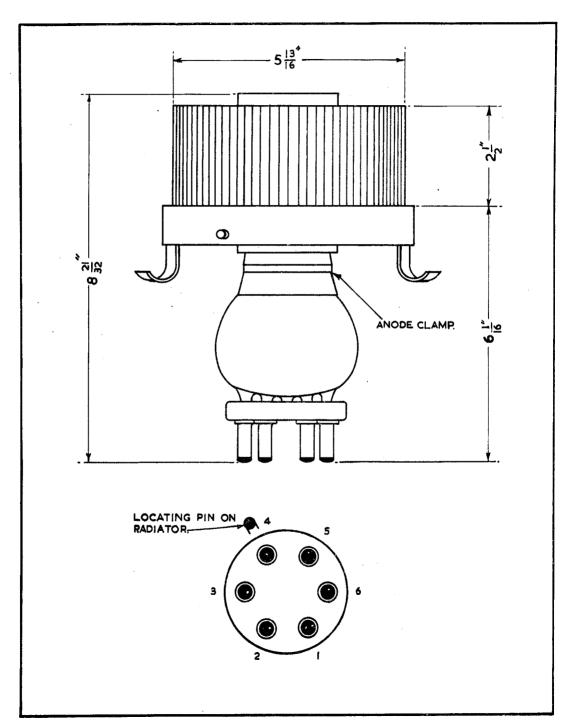
TYPE OF VALVE: Air Blast Cooled Portion of the Cathole: Directly Heated. The ENVELOPE: Copper/glass PROTOTYPE 5J/180E.		MARKING See K1001/4			
RATING		<u>Note</u>	Sec	BASE e drawing, page 3	
Heater Voltage (V) Heater Current (A) Max.Direct Anode Voltage (kV)	9.0 30.0 6.0 2.5 3.5 1.5 0.25 6.0 5.0 30 Mc/s	A A	CONNECTIONS		
Max. Direct Anode Current Max. Anode Dissipation Max. Direct Screen Voltage Max. Direct Screen Current Mutual Conductance Screen Grid Max. Freq. for above ratings (A) (mA/V) (u)			Pin	Electrode	
			1 2 3 4 5 6	Grid 3 Filament Grid 2 Filament Grid 3 Grid 1 Anode Clamp	
			DIMENSIONS		
			See	drawing, page 3	
CAPACITANCES (pF) Cag Cin Cout	0.6 32.0 21.0		PACKAGING See K 1005		
A. Measured at Va=6kV, Vg2=1.5kV, I	NOTES		······		

To be performed in addition to those applicable in K 1001

	Test Conditions					Test		Limits		No.	N	
	Vf (V)	Vg1 (V)	Vg2 (V)	Vg3 (V)	Va (kV)	Ia (mA)			Min	Max	Tested	t e
a	9.0	-	-	-	-	-	If	(A)	27	33	100%	1
ъ	9.0	Ad- just	1500	0	6	500	-Ig1	(uA)	-	25.0	100%	1,2
С	9.0	Record (Vg1A)	1500	0	6	500	Control Voltage		-200	-320	100%	1
ã	9.0	Ad- just	1500	0	6	500	Ig2	(mA)	•	30	100%	1
е	9.0	2000	2000	2000	2.0		Peak Emi Ie	ssion (A)	12	•	100%	3
f	9.0	Set at Vg1A +25V	1500	0	6	Record Ia2	gm <u>500-Ia2</u> 25	(mA/V)	4.75	6.75	100%	1

NOTES

- 1. For test 'a' and all subsequent tests the filament shall be heated by 50 c.p.s. current and the return of the grid and anode circuits shall be connected to the central point of the filament transformer secondary except in test 'e' (see note 3) G3 should also be connected directly to the point of common return for all tests except 'e'. Air flow 580 cubic feet/minute at a pressure drop of 2½ inches water gauge.
- In test 'b', Ig1 shall not exceed the value specified at the end of a 10 minute test and shall not be rising.
- 3. In test 'e' the emission shall be measured by the discharge of a condenser charged to 2.0 kV and connected between the anode and all grids strapped and one end of the filament.



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