VALVE ELECTRONIC

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

CV2190

Specification: GPO/CV2190/Issue 2 Dated: December, 1953. To be read in conjunction with K 1001	SECURITY Specification: Unclassified Valve: Unclassified

⟶ indicates a change

TYPE OF VALVE: Velocity modulated coaxial line osc.

CATHODE: Indirectly heated

ENVELOPE: Glass

PROTOTYPE V 233 A/1K

MARKING

See K1001/4

DIMENSIONS

See drawing on Page 3

Rating			Note
Heater voltage	(V)	6.3	A
Nominal heater current	(A)	0.3	A
Tuning range	(Mc/s)	2700 to 4200	
Control grid voltage Vg1	(V)	-40	
Resonator voltage VR	(V)	250±5%	B
Screen voltage Vg2	(V)	0 to VR + 50	
Anode voltage Va	(V)	VR + 10 to + 20	
Min. output	(W)	0.3	
Mean power input (max.)	(W)	18	C
Peak cathode current (max.)	(mA)	65	
Magnetic field (min.)	(H)	1,000	

Base

B7G

Connexions

Pin	Electrode
1	Control Grid
2	Cathode
3	Heater
4	Heater
5	Anode
6	Resonator
7	Screen Grid

Notes

A. AC frequencies above 1.5 kc/s must not be used.

B. At 3300 Mc/s. For other frequencies VR proportional to f^2

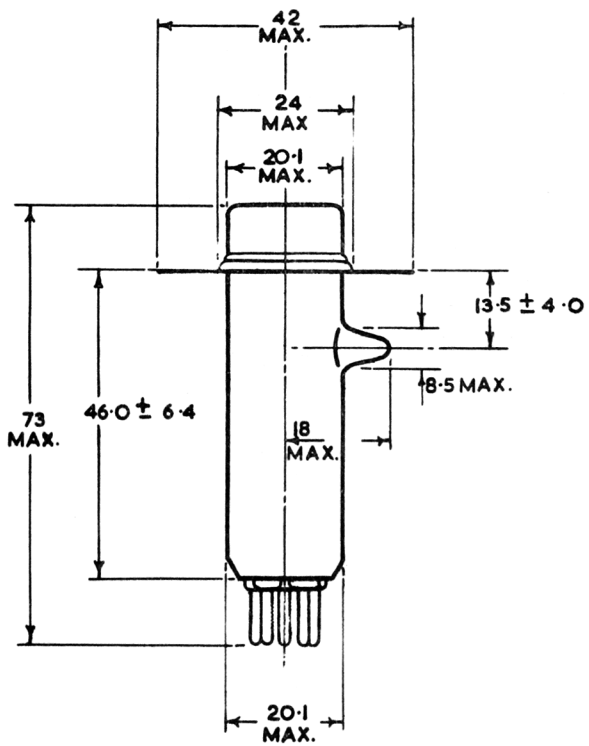
C. Input power to all electrodes other than the heater.

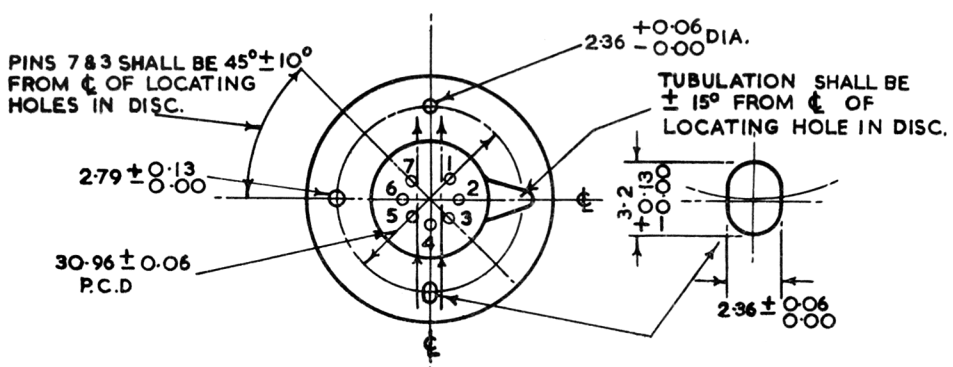
Tests

To be performed in addition to those applicable in K1001

	Test Condition							Test	Limits		No. Tested	Note
	VH (V)	Vg1 (V)	Va (V)	VR (V)	Vg2 (V)	Ia (mA)	Ic (mA)		Min.	Max.		
a	6.3	-	-	-	-	-	-	Ih (A)	0.27	0.33	100%	
b	6.3	-200	235	225	150	-	-	Ig1 (μA)	-	30	100%	
c	6.0	-40	235	225	Adjust	Read	65	Ig2 (mA) Ia (mA) Vg2 (V)	- 38 -	5 - 210	100%	
d	6.0	-40	VR+10	Adjust for max. power output	Adjust	33	-	Oscillation at 8.33 cms Power output (mW) VR (v)	 350 270	 - 320	100%	1
e	6.0	-40	VR+10	Adjust for max. power output	Adjust	26	-	Oscillation at 7.2 cms Power output (mW) VR (v)	 350 370	 420	100%	1

Note 1. The tests are to be performed with the valve in an approved circuit.





ALL DIMENSIONS IN mm