

## VALVE ELECTRONIC

CV2190

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

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

→ indicates a change

<u>TYPE OF VALVE</u> : Velocity modulated coaxial line osc.				<u>MARKING</u> See K1001/4	
<u>CATHODE</u> : Indirectly heated				<u>DIMENSIONS</u> See drawing on Page 3	
<u>ENVELOPE</u> : Glass				<u>Base</u> B7G	
<u>PROTOTYPE</u> V 233 A/1K					
<u>Rating</u>			<u>Note</u>	<u>Connexions</u>	
Heater voltage	(V)	6.3	A	<u>Pin</u>	<u>Electrode</u>
Nominal heater current	(A)	0.3	A		
Tuning range	(Mc/s)	2700 to 4200	B	1	Control Grid
Control grid voltage Vg1	(V)	-4.0			
Resonator voltage VR	(V)	250 ± 5%			
Screen voltage Vg2	(V)	0 to VR + 50			
Anode voltage Va	(V)	VR + 10 to + 20	C	3	Cathode
Min. output	(W)	0.3			
Mean power input (max.)	(W)	18			
Peak cathode current (max.)	(mA)	65			
Magnetic field (min.)	(H)	1,000		4	Heater
				5	Heater
				6	Anode
				7	Resonator
					Screen Grid
<u>Notes</u>					
A. AC frequencies above 1.5 kc/s must not be used.					
B. At 3300 Mc/s. For other frequencies VR proportional to f <sup>2</sup>					
C. Input power to all electrodes other than the heater.					

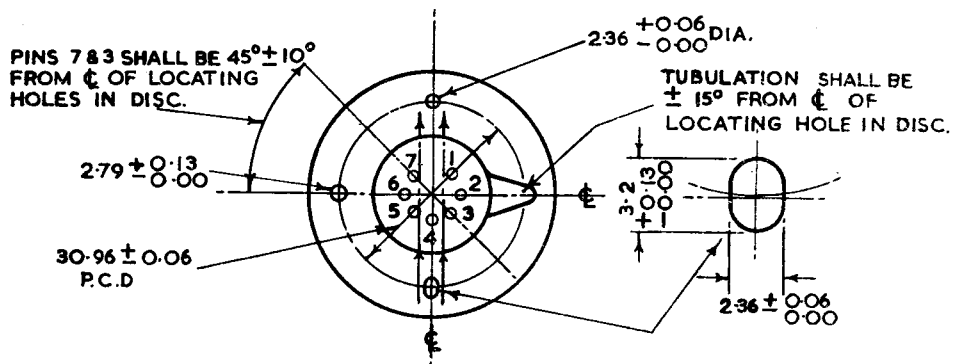
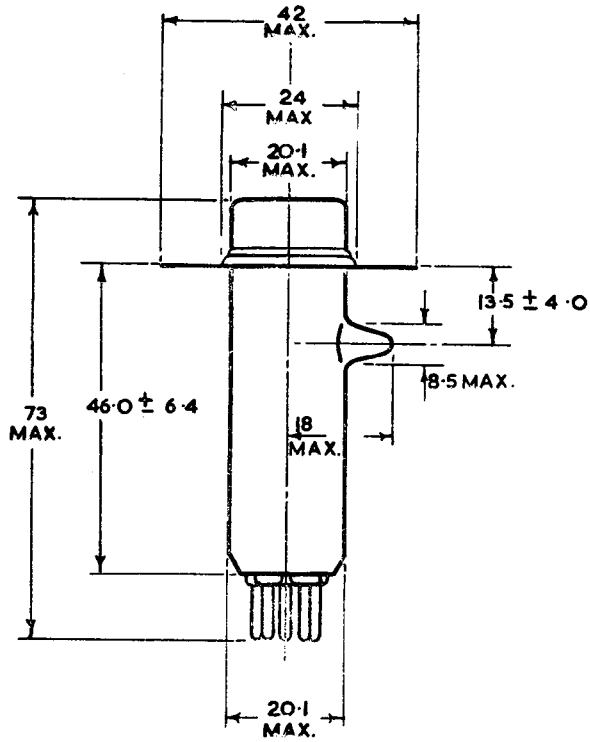
# CV2190

## 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