

UNITED KINGDOM ATOMIC ENERGY AUTHORITY (A.E.R.E.)VALVE ELECTRONIC**CV2348**

Specification A.E.R.E./CV.2348 Issue 2 Dated 8-8-55 To be read in conjunction with K.1001			<u>SECURITY</u> <table border="1"> <tr> <td><u>Specification</u> UNCLASSIFIED</td> <td><u>Valve</u> UNCLASSIFIED</td> </tr> </table>		<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED
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<u>TYPE</u> - Electrometer Pentode. <u>CATHODE</u> - Directly Heated. <u>ENVELOPE</u> - Glass. <u>PROTOTYPE</u> - VX.8117			<u>MARKING</u> See K.1001/4 Except that type number, date and factory code shall appear only.			
			<u>BASE</u> See Drawing on Page 3			
<u>RATING</u>		Note	<u>CONNECTIONS</u> <u>AND</u> <u>DIMENSIONS</u> See Drawing on Page 3			
Filament Voltage	(V)	1.25				
Filament Current	(mA)	8.2				
Max. Anode Supply Voltage	(V)	45				
Max. Control Grid Voltage	(V)	-50				
Max. Screen Voltage	(V)	10				
Max. Cathode Current	(μ A)	180				
Mutual Conductance	(μ A/V)	11			A	
Amplification factor	(μ)	110			A	
Grid Current	(A)	3×10^{-15}	A			
Notes - A. Measured at $V_a = 10v$, $I_a = 5\mu A$, $V_{g1} = -2.5v$. B. Anode voltage must be applied after the heater voltage to avoid excessive drift. C. Do not finger glass envelope within 1/2-in. of leads, and wires are not to be soldered nearer than 1/2-in. to the base to avoid contamination of the glass.						

TESTS

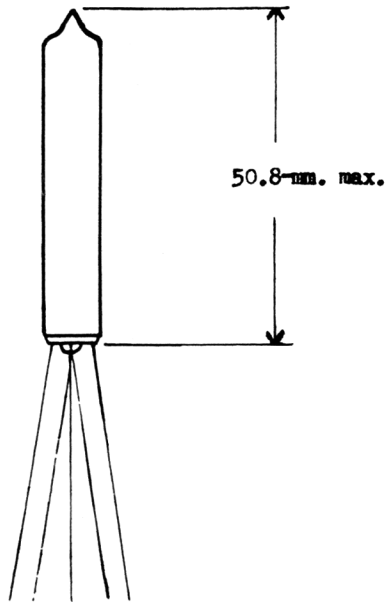
Page 2.

To be performed at least one month after manufacture.

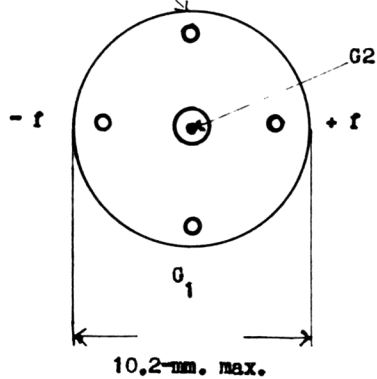
Test Conditions						Test	Limits		No. Tested	Notes
							Min.	Max.		
	Vf	Va	Ia	Vg1	Vg2					
a	1.25					If (mA)	7.2	9.2	5%	
b	1.25	10	5	-2.5	adj.	Vg2 (V)	5.0	7.5	100%	
c	1.25	10	5	-2.5	as(b)	gm (uA/V)	8	—	100%	1
d	1.25	10	5	-2.5	as(b)	u	80	—		2
e	1.25	10	5	-2.5	as(b)	Ig1 (A)	0	8×10^{-15}	100%	3

NOTES

1. Measured by increasing the bias by not more than 0.1 volt.
2. Measured by decreasing Va by between 3 and 5 volts, the anode current being maintained at 5-uA by adjusting Vg1.
3. Measurements to be made in an electrostatically shielded, light tight container.



Red Spot on Bulb
denotes anode lead



VIEW OF UNDERSIDE OF BASE