

Specification A.E.R.E./CV.2348 Issue 2 Dated 8-8-55 To be read in conjunction with K.1001			SECURITY <u>Specification</u> UNCLASSIFIED		<u>Valve</u> UNCLASSIFIED	
<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.						

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TESTS

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To be performed at least one month after manufacture.

	VF	Test Conditions				Test	Limits		No. Tested	Notes
		Va	Ia	Vg1	Vg2		Min.	Max.		
a	1.25					I _f (mA)	7.2	9.2	5%	
b	1.25	10	5	-2.5	adj.	V _{g2} (V)	5.0	7.5	100%	
c	1.25	10	5	-2.5	as(b)	g _m (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)	I _{g1} (A)	0	8 x 10 ⁻¹⁵	100%	3

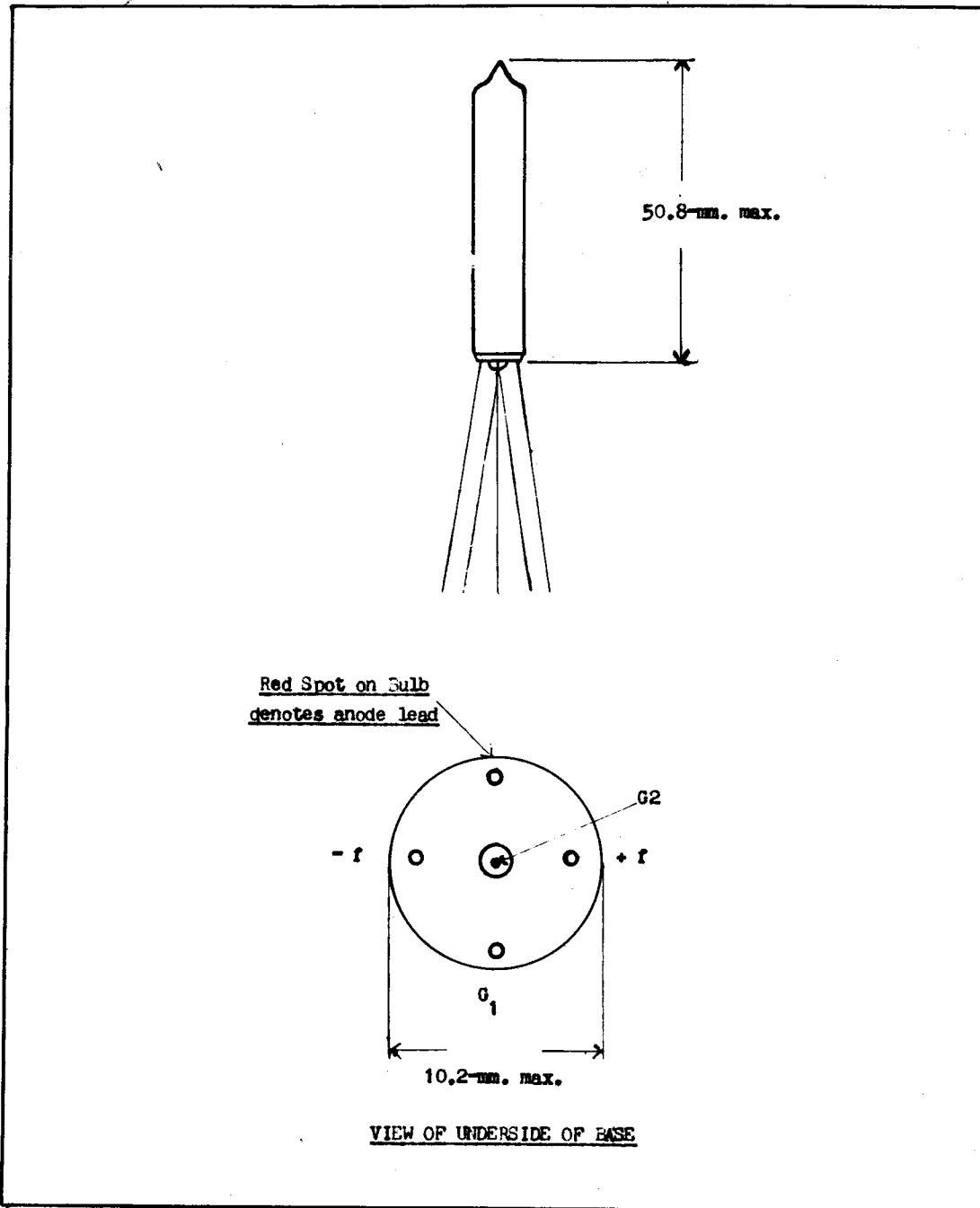
NOTES

1. Measured by increasing the bias by not more than 0.1 volt.
2. Measured by decreasing V_a by between 3 and 5 volts, the anode current being maintained at 5-uA by adjusting V_{g1}.
3. Measurements to be made in an electrostatically shielded, light tight container.

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