

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

Specification A.E.R.E./CV.2269 Issue 3 Dated 5.4.56. To be read in conjunction with K.1001	SECURITY <u>Specification</u> <u>Valve</u> UNCLASSIFIED      UNCLASSIFIED
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→ Indicates a change

TYPE OF VALVE - Electrometer Triode CATHODE - Directly Heated ENVELOPE - Glass PROTOTYPE - VX.8049, CV.495			<u>MARKING</u>  See K1001/4
RATING		Note	<u>BASE</u> See Drawing on page 2.
Heater Voltage (V)	1.25	A	<u>CONNECTIONS AND DIMENSIONS</u> See Drawing on page 2
Heater Current (mA)	13		
Max. Anode Voltage (V)	25		
Max. Anode Current (uA)	250		
Mutual Conductance (uA/V)	80		
Amplification Factor (u)	2.2		
Max. Negative Grid Current (A)	$1.0 \times 10^{-12}$	A	
<u>NOTES</u>  A. Measured at $V_a = 9V$ $I_a = 100 \text{ uA}$ .  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.			

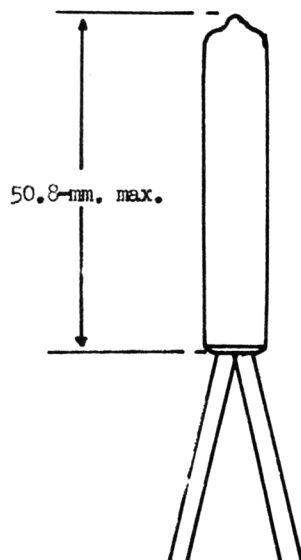
TESTS

To be performed in addition to those applicable in K1001

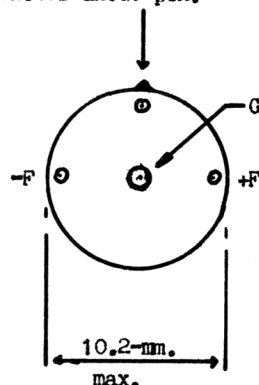
Test Conditions				Test	Limits		No. Tested	Notes
					Min.	Max.		
	VH	VA	IA (uA)					
A	1.25	-	-	Ih (mA)	11.5	14.5	100% or S	
B	1.25	9	100	Vg (V)	-2.0	-3.75	100%	
C	1.25	9	100	gm (uA/V)	70	90	100%	1
D	1.25	9	100	Ig (A)	-	$1.0 \times 10^{-12}$	100%	2
E	1.25	9		Ia for Ig = 0. i.e. cross over test (uA)	160		100%	2 & 3
F	1.25	9	100	u	1.7	2.7	100% or S	1

NOTES

1. Measured by increasing the bias by 0.5 volts negative from the value obtained in clause (B).  
In clause (F), VA is adjusted to maintain constant IA.
2. Measurements should be made in an electrostatically shielded, light tight container.
3. Measured by isolating the grid lead and checking that the equilibrium value of IA is not less than 160 u.



Red spot on bulb denotes anode pin.



View on underside of base.