

ROGERS

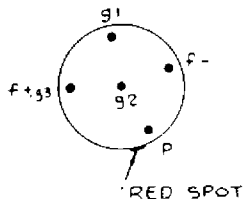
electron tube reference data



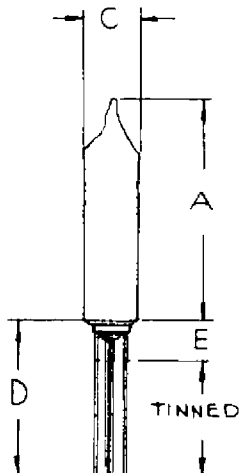
7727

Subminiature
Electrometer Pentode
(Triode Connected)

for
Logarithmic
Applications



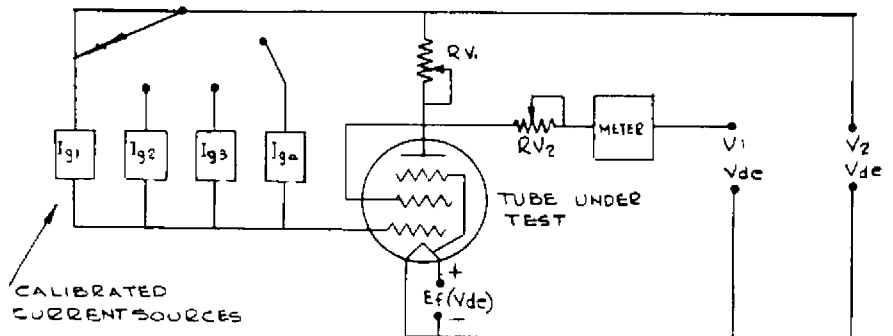
Dimensions			
Dim.	Min.	Max.	Units
A		1.750	Inches
C	.366	.400	"
D	1.25		"
E		.25	"



ELECTRICAL DATA

Test	Conditions	Symbol	Limits		Units
			Min.	Max.	
Filament Current	$E_f = 1.25 \text{ Vdc}$	I_f	7.2	9.2	mA
Circuit Test (1)	$E_f = 1.25 \text{ Vdc}$ $V_1 = 6.25 \text{ Vdc}$ $V_2 = 12.5 \text{ Vdc}$ Notes 1, 2, 3	-	-	-	-
Circuit Test (2)	$E_f = 1.35 \text{ Vdc}$ $V_1 = 6.75 \text{ Vdc}$ $V_2 = 13.5 \text{ Vdc}$ Notes 1, 2, 4	-	-	-	-
Circuit Test (3)	$E_f = 1.15 \text{ Vdc}$ $V_1 = 5.75 \text{ Vdc}$ $V_2 = 11.5 \text{ Vdc}$ Notes 1, 2, 5	-	-	-	-

FIG. 1



ROGERS *electronic tubes & components*

A DIVISION OF PHILIPS ELECTRONICS INDUSTRIES LTD.

116 VANDERHOOF AVE. TORONTO 17, ONTARIO

NOTES

1. This test to be carried out in the test circuit in Fig. 1

RV_1 = Variable from 15,750 ohms to 90,000 ohms.

RV_2 = Variable from 0 - 13,500 ohms.

Meter full scale = 100 μA maximum meter resistance = 3,000 ohms $\neq$ 2%.

I_{g1} = 10^{-12} amps.

I_{g3} = 10^{-9} amps.

I_{g2} = 3.3×10^{-11} amps.

I_{g4} = 5×10^{-9} amps.

2. The test circuit is to be enclosed in an electrostatically shielded light tight box.

3. The following sequence of measurements shall be made:-

- a. With current source IG_1 in circuit adjust RV_1 for meter reading = 0.
- b. With current source IG_3 in circuit adjust RV_2 for meter reading = 40 μA .
- c. With current source IG_2 in circuit read value of meter current. Value shall be within the limits 18.50 to 21.25 μA .
- d. With current source IG_4 in circuit read value of meter current. Value shall be within the limits 49.00 to 52.00 μA .

Any tube which cannot meet the requirements of (a), (b), (c) and (d) above shall be considered defective.

4. The following sequence of measurements shall be made:

- a. With current source IG_1 in circuit adjust RV_1 for meter reading = 0.
- b. With current source IG_3 in circuit adjust RV_2 for meter reading = 39 μA .

Any tube which cannot meet the requirements of (a) and (b) above shall be considered defective.

5. The following sequence of measurements shall be made:

- a. With current source IG_1 in circuit adjust RV_1 for meter reading = 0.
- b. With current source IG_3 in circuit adjust RV_2 for meter reading = 41 μA .

Any tube which cannot meet the requirements of (a) and (b) above shall be considered defective.