

# ROGERS

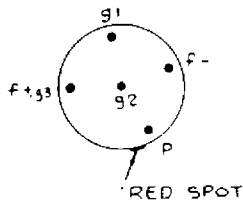
electron tube reference data



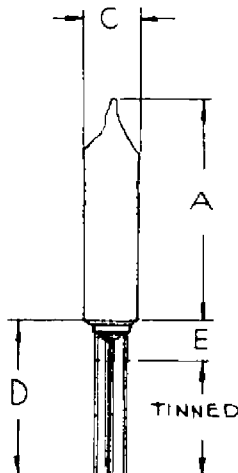
# 7727

Subminiature  
Electrometer Pentode  
(Triode Connected)

for  
Logarithmic  
Applications

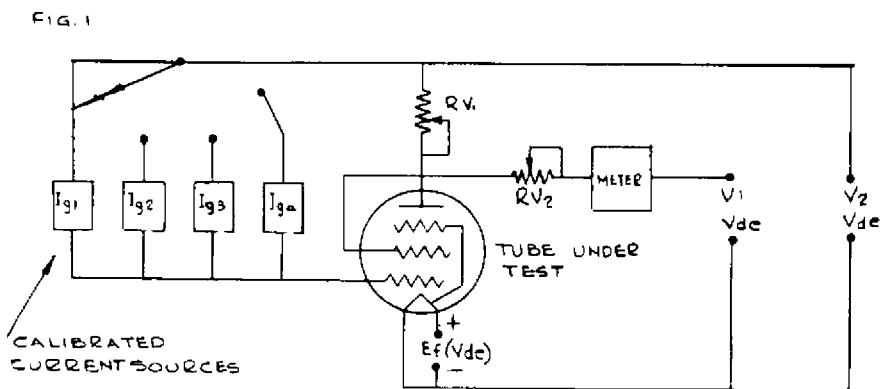


Dimensions			
Dim.	Min.	Max.	Units
A		1.750	Inches
C	.366	.400	"
D	1.25		"
E		.25	"



## 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	-	-	-	-



**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<sub>1</sub> = Variable from 15,750 ohms to 90,000 ohms.

RV<sub>2</sub> = Variable from 0 - 13,500 ohms.

Meter full scale = 100  $\mu$ A maximum meter resistance =  
3,000 ohms  $\pm$  2%.

I<sub>g1</sub> = 10<sup>-12</sup> amps.

I<sub>g3</sub> = 10<sup>-9</sup> amps.

I<sub>g2</sub> = 3.3 x 10<sup>-11</sup> amps.

I<sub>g4</sub> = 5 x 10<sup>-9</sup> 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 IG1 in circuit adjust RV<sub>1</sub> for meter reading = 0.

- b. With current source IG3 in circuit adjust RV<sub>2</sub> for meter reading = 40  $\mu$ A.

- c. With current source IG2 in circuit read value of meter current. Value shall be within the limits 18.50 to 21.25  $\mu$ A.

- d. With current source IG4 in circuit read value of meter current. Value shall be within the limits 49.00 to 52.00  $\mu$ A.

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 IG1 in circuit adjust RV<sub>1</sub> for meter reading = 0.

- b. With current source IG3 in circuit adjust RV<sub>2</sub> for meter reading = 39  $\mu$ A.

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 IG1 in circuit adjust RV<sub>1</sub> for meter reading = 0.

- b. With current source IG3 in circuit adjust RV<sub>2</sub> for meter reading = 41  $\mu$ A.

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