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# MEDIUM-MU TRIODE

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage . . . . .	6.3	ac or dc volts
Current . . . . .	0.3	amp

Direct Interelectrode Capacitances:<sup>0</sup>

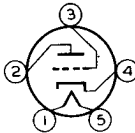
Grid to Plate . . . . .	2.8	$\mu\text{f}$
Grid to Cathode . . . . .	3.5	$\mu\text{f}$
Plate to Cathode . . . . .	2.5	$\mu\text{f}$

<sup>0</sup> with no external shield.

### Mechanical:

Mounting Position . . . . .	Any
Maximum Overall Length . . . . .	4-3/16"
Seated Length . . . . .	3-3/8" $\pm$ 3/16"
Maximum Diameter . . . . .	1-9/16"
Bulb . . . . .	ST-12
Base . . . . .	Small-Shell Small 5-Pin
Basing Designation for BOTTOM VIEW . . . . .	5A

Pin 1 - Heater  
 Pin 2 - Plate  
 Pin 3 - Grid



Pin 4 - Cathode  
 Pin 5 - Heater

## AMPLIFIER - Class A<sub>1</sub>

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	250 max.	volts
PLATE DISSIPATION . . . . .	1.4 max.	watts ←
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	90 max.	volts
Heater positive with respect to cathode.	90 max.	volts ←

### Typical Operation and Characteristics:

Plate Voltage . . . . .	100	250	volts
Grid Voltage . . . . .	-5	-13.5	volts
Amplification Factor . . . . .	13.8	13.8	
Plate Resistance . . . . .	12000	9500	ohms
Transconductance . . . . .	1150	1450	$\mu\text{mhos}$
Plate Current . . . . .	2.5	5	ma

### Maximum Circuit Values:

Grid-Circuit Resistance . . . . .	1 max.	megohm
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← Indicates a change.



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DETECTOR**Maximum Ratings, Design-Center Values:**

PLATE VOLTAGE. . . . .	250 max.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	90 max.	volts
Heater positive with respect to cathode.	90 max.	volts

**Typical Operation as Biased Detector:**

Plate Voltage. . . . .	100	250 . .	volts
Grid Voltage (Approx.) . . . . .	-8	-20 . .	volts
Plate Current. . . . .	Adjust to 0.2 ma. with no input signal		
Cathode-Bias Resistor <sup>▲</sup> . . . . .	$\left\{ \begin{array}{cc} 30000 & 30000 \\ \text{to} & \text{to} \\ 150000 & 150000 \end{array} \right\}$		ohms

**Typical Operation as Grid-Resistor Detector:**

Plate Voltage. . . . .	45 . .	volts
Grid . . . . .	Return to cathode	
Grid Resistor. . . . .	1 to 5	megohms
Grid Capacitor . . . . .	250 . .	$\mu\text{mf}$

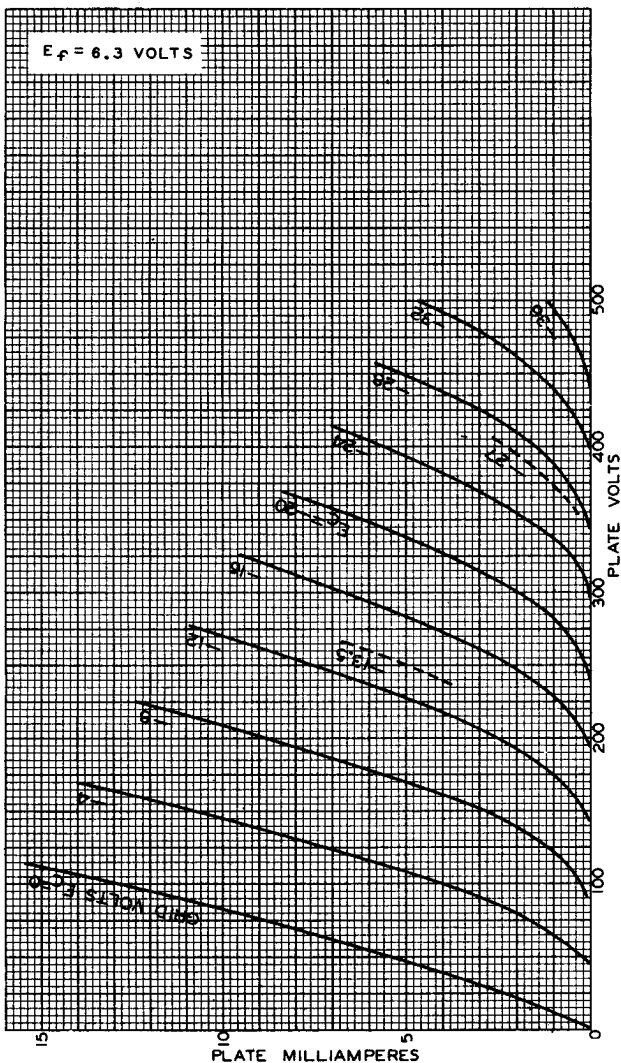
<sup>▲</sup> Not critical.



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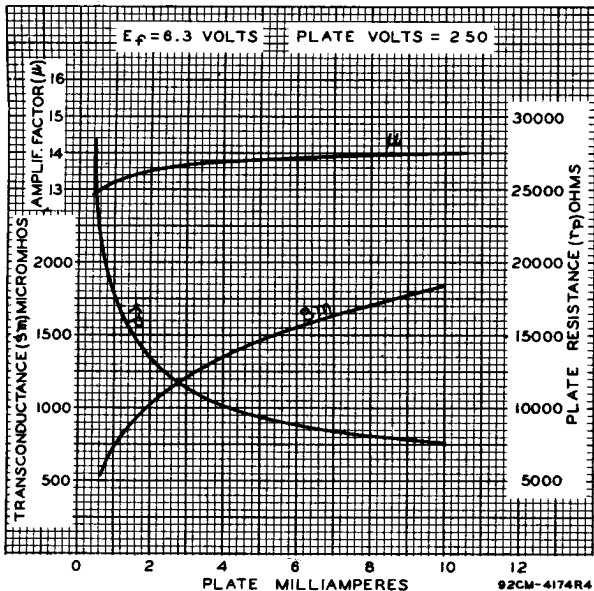
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### AVERAGE PLATE CHARACTERISTICS





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