



6CU8

## MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

*With heater having controlled warm-up time*

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathodes:  
 Voltage (AC or DC) . . . . . 6.3 volts  
 Current . . . . . 0.45 ± 6% amp  
 Warm-up time (Average) . . . . . 11 sec

#### Direct Interelectrode Capacitances:<sup>o</sup>

##### Triode Unit:

Grid to plate . . . . . 1.6 μf  
 Grid to cathode & pentode grid No.3  
 & internal shield, and heater . . . 1.9 μf  
 Plate to cathode & pentode grid No.3  
 & internal shield, and heater . . . 1.6 μf

##### Pentode Unit:

Grid No.1 to plate . . . . . 0.025 max. μf  
 Grid No.1 cathode, grid No.3 &  
 triode cathode & internal shield,  
 grid No.2, and heater . . . . . 7 μf  
 Plate to cathode, grid No.3 &  
 triode cathode & internal shield,  
 grid No.2, and heater . . . . . 2.4 μf  
 Pentode grid No.1 to triode plate . . . 0.03 max. μf  
 Pentode plate to triode plate . . . . 0.07 max. μf

#### Characteristics, Class A<sub>1</sub> Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage . . . . .	125	125	volts
Grid-No.2 Supply Voltage . . . . .	-	125	volts
Grid-No.1 Voltage . . . . .	-1	0	volts
Cathode Resistor . . . . .	0	56	ohms
Amplification Factor . . . . .	24	-	
Plate Resistance (Approx.) . . . . .	4100	170000	ohms
Transconductance . . . . .	5800	7800	μhos
Plate Current . . . . .	17	12	ma
Grid-No.2 Current . . . . .	-	3.8	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20 . . . . .	-12	-6	volts
Grid-No.1 Voltage (Approx.) for plate ma. = 1.6, and cathode resistor (ohms) = 0 . . . . .	-	-3	volts

#### Mechanical:

Operating Position . . . . . Any  
 Maximum Overall Length . . . . . 2-3/16"  
 Maximum Seated Length . . . . . 1-15/16"

← Indicates a change.

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Length, Base Seat to Bulb Top (Excluding tip) . . . 1-9/16" ± 3/32"  
 Diameter . . . . . 0.750" to 0.875"  
 Dimensional Outline . . . . . See General Section  
 Bulb . . . . . T6-1/2  
 Base . . . . . Small-Button Noval 9-Pin (JEDEC No. E9-1)  
 Basing Designation for BOTTOM VIEW . . . . . 9GM

Pin 1 - Triode Cathode, Pentode Grid No. 3, Internal Shield		Pin 4 - Heater
Pin 2 - Pentode Plate		Pin 5 - Heater
Pin 3 - Pentode Grid No. 2		Pin 6 - Pentode Cathode
		Pin 7 - Pentode Grid No. 1
		Pin 8 - Triode Grid
		Pin 9 - Triode Plate

**AMPLIFIER — Class A<sub>1</sub>**

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

	Triode Unit	Pentode Unit	
PLATE VOLTAGE . . . . .	330 max.	330 max.	volts
GRID-No. 2 (SCREEN-GRID) SUPPLY VOLTAGE . . . . .	-	330 max.	volts
GRID-No. 2 VOLTAGE . . . . .	-	<i>See Grid-No. 2 Input Rating Chart at front of Receiving Tube Section</i>	
GRID-No. 1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value . . . . .	0 max.	0 max.	volts
GRID-No. 2 INPUT:			
For grid-No. 2 voltages up to 165 volts . . . . .	-	0.55 max.	watt
For grid-No. 2 voltages between 165 and 330 volts . . . . .	-	<i>See Grid-No. 2 Input Rating Chart at front of Receiving Tube Section</i>	
PLATE DISSIPATION . . . . .	2.8 max.	2.3 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . . . . .	200 max.	200 max.	volts
Heater positive with respect to cathode . . . . .	200 <sup>▲</sup> max.	200 <sup>▲</sup> max.	volts

<sup>○</sup> Without external shield.

<sup>▲</sup> The dc component must not exceed 100 volts.

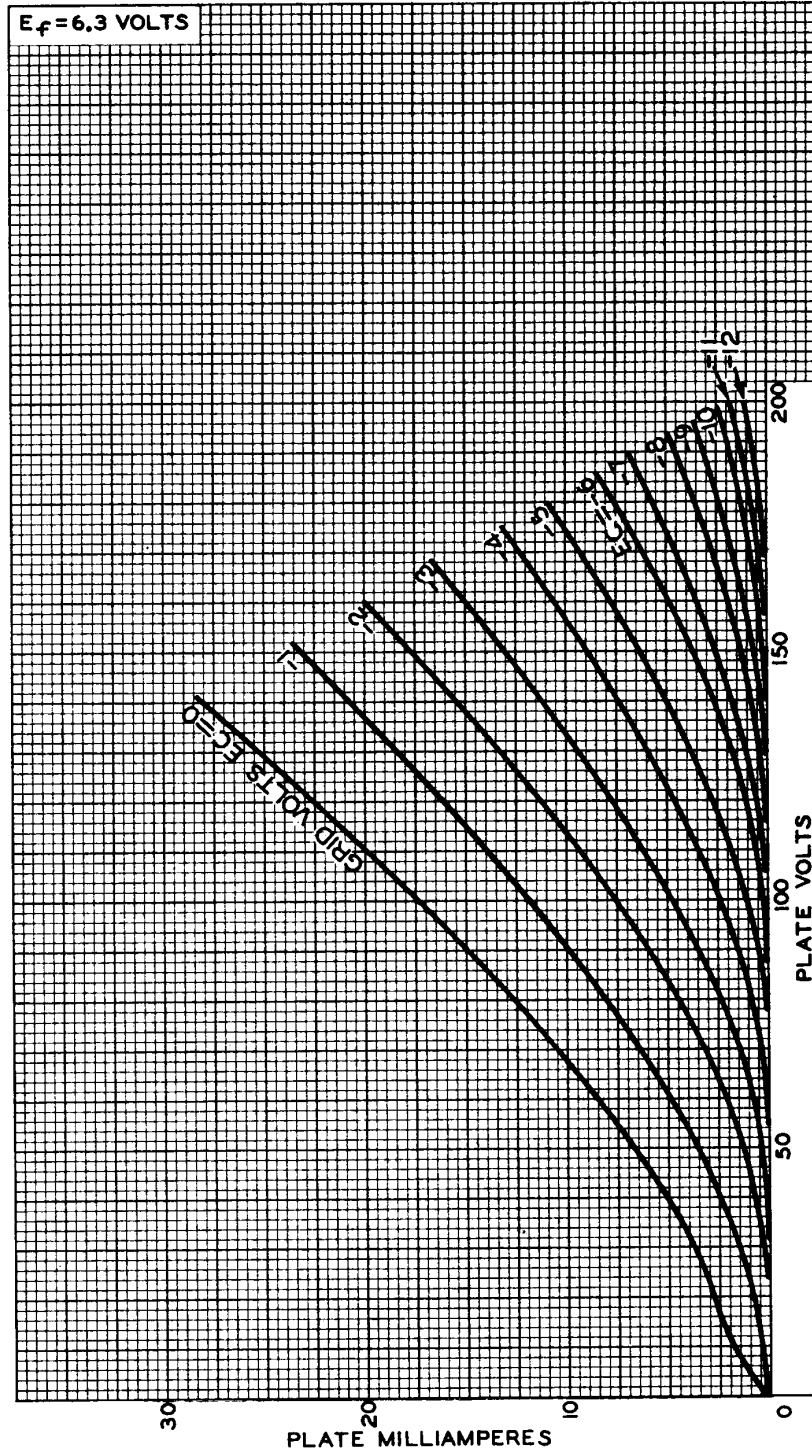
→ Indicates a change.



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### AVERAGE PLATE CHARACTERISTICS TRIODE UNIT

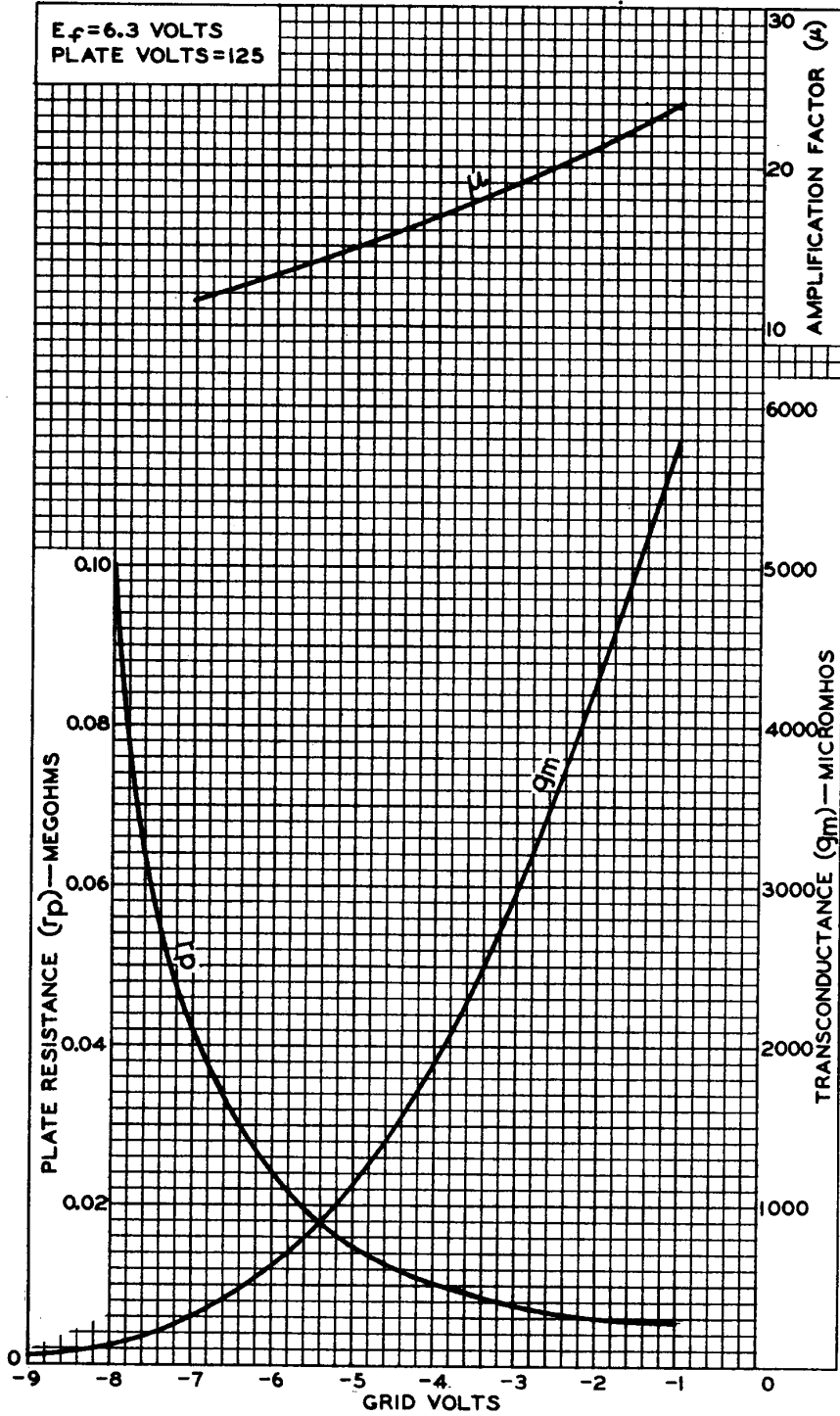


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### AVERAGE CHARACTERISTICS TRIODE UNIT

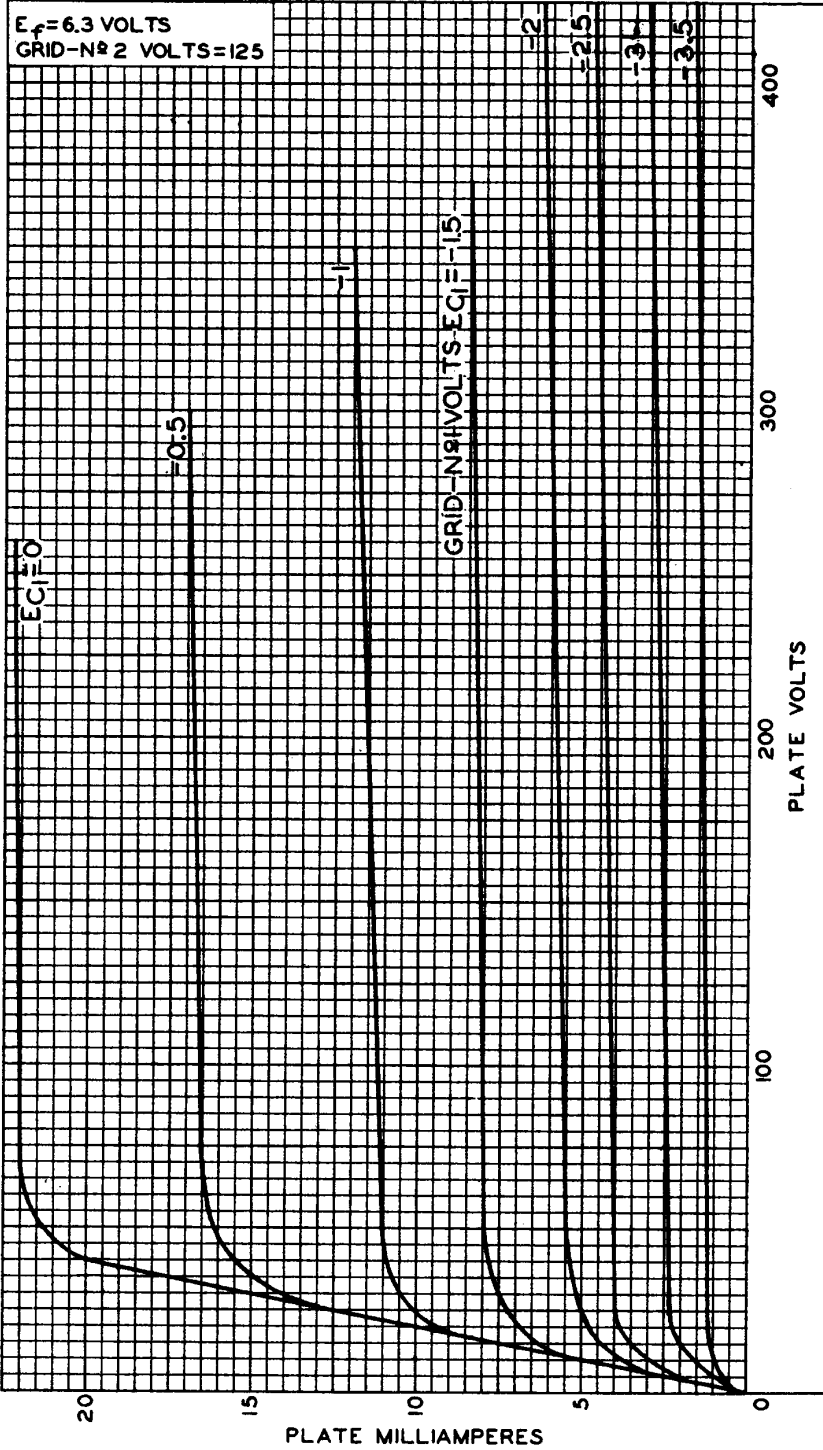




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### AVERAGE PLATE CHARACTERISTICS PENTODE UNIT



ELECTRON TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-10646

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### AVERAGE CHARACTERISTICS PENTODE UNIT

