



6CU8

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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 $\pm$ 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:⁰

Triode Unit:

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

Pentode Unit:

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

Characteristics, Class A₁ 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	μ mhos
Plate Current	17	12	ma
Grid-No.2 Current	—	3.8	ma
Grid-No.1 Voltage (Approx.) for plate μ a = 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.

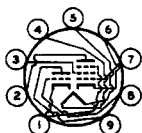


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Length, Base Seat to Bulb Top (Excluding tip). . . 1-9/16" $\pm$ 3/32"
 Diameter. 0.750" to 0.875"
 Dimensional Outline See General Section
 Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No. E9-1)
 Basing Designation for BOTTOM VIEW. 9GM

Pin 1—Triode
 Cathode,
 Pentode
 Grid No.3,
 Internal
 Shield
 Pin 2—Pentode
 Plate
 Pin 3—Pentode
 Grid No.2



Pin 4—Heater
 Pin 5—Heater
 Pin 6—Pentode
 Cathode
 Pin 7—Pentode
 Grid No.1
 Pin 8—Triode
 Grid
 Pin 9—Triode
 Plate

AMPLIFIER — Class A₁

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	—	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	
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	—	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	
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 ^Δ max.	200 ^Δ max.	volts

⁰ Without external shield.

^Δ The dc component must not exceed 100 volts.

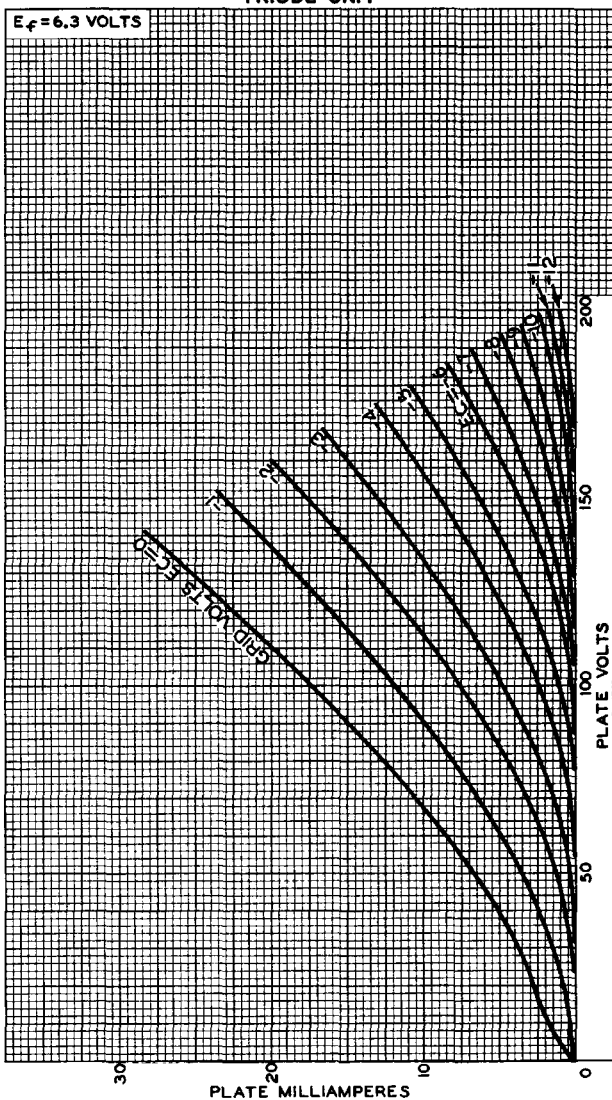
→ Indicates a change.



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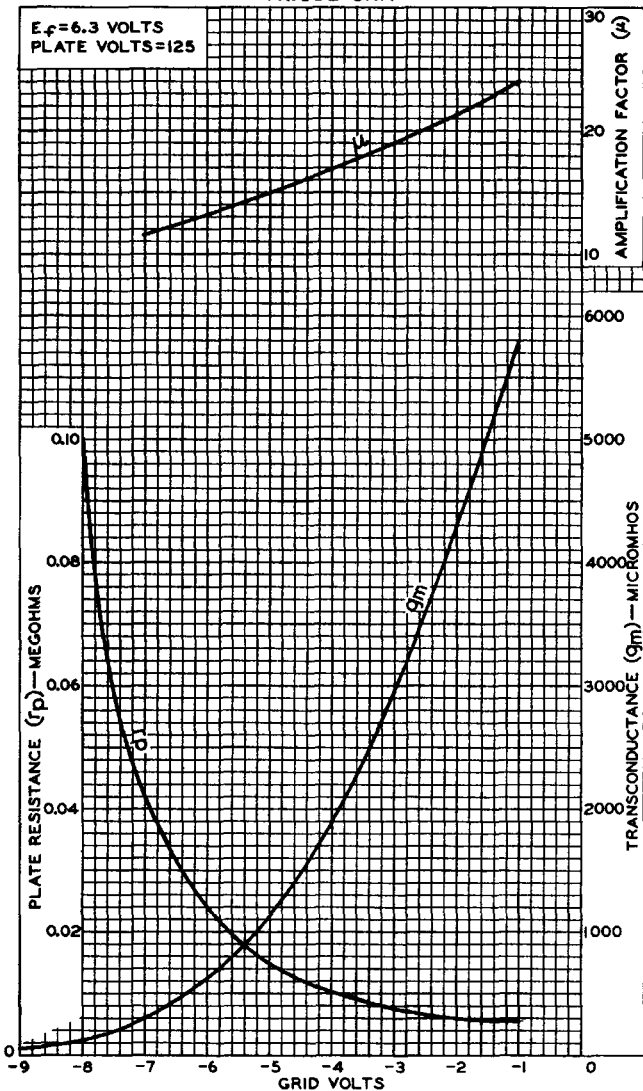
AVERAGE PLATE CHARACTERISTICS TRIODE UNIT



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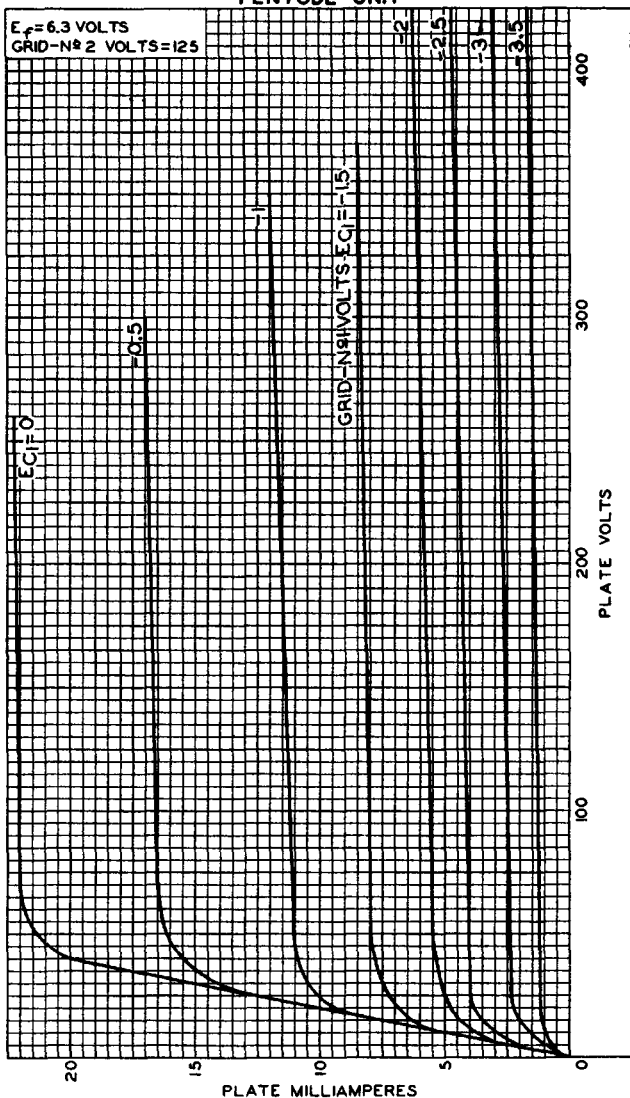
AVERAGE CHARACTERISTICS
TRIODE UNIT $E_f = 6.3$ VOLTS
PLATE VOLTS = 125



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AVERAGE PLATE CHARACTERISTICS PENTODE UNIT



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AVERAGE CHARACTERISTICS PENTODE UNIT

$E_f = 6.3$ VOLTS
PLATE VOLTS = 125
GRID-N#2 VOLTS = 125

