

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC) $6.3 \pm 10\%$ volts

Current at 6.3 volts. 0.75 amp

Direct Interelectrode Capacitances:▲

Triode Unit:

Grid to plate 3.5 μf

Grid to cathode, pentode
cathode & grid No.3 &
internal shield,
and heater. 2.8 μf

Plate to cathode, pentode
cathode & grid No.3 &
internal shield,
and heater. 2.6 μf

Pentode Unit:

Grid No.1 to plate. 0.1 max. μf

Grid No.1 to cathode &
internal shield & grid
No.3, grid No.2, and
heater. 10 μf

Plate to cathode & internal
shield & grid No.3, grid
No.2, and heater. 4.2 μf

Triode grid to pentode plate. 0.015 max. μf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage.	200	45	200 volts
Grid-No.2 Supply Voltage.	—	125	125 volts
Grid-No.1 Voltage	-2	0	— volts
Cathode Resistor.	—	—	68 ohms
Amplification Factor.	70	—	—
Plate Resistance (Approx.)	17500	—	75000 ohms
Transconductance.	4000	—	12500 μmhos
Plate Current	4	40●	25 ma
Grid-No.2 Current	—	15●	7 ma
Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 100$	—	—	-9 volts
Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 20$	-6	—	— volts

Mechanical:

Operating Position. Any

Maximum Overall Length. 2-5/8"

Maximum Seated Length 2-3/8"



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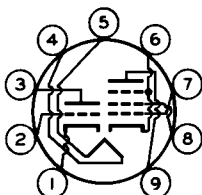
Length, Base Seat to Bulb Top (Excluding tip) . . . 2" $\pm$ 3/32"
Diameter 0.750" to 0.875"
Dimensional Outline. See *General Section*
Bulb T6-1/2
Base Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW 9DX

- Pin 1 - Triode Cathode

Pin 2 - Triode Grid

Pin 3 - Triode Plate

Pin 4 - Heater

Pin 5 - Heater
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- Pin 6 - Pentode Cathode, Grid No.3, Internal Shield

Pin 7 - Pentode Grid No.1

Pin 8 - Pentode Grid No.2

Pin 9 - Pentode 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 <i>Grid-No.2 Input Rating Chart</i> 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.	-	1.1 max.	watts
For grid-No.2 voltages between 165 and 330 volts.	-	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section	
PLATE DISSIPATION.	1 max.	5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . . .	200 max.	200 max.	volts
Heater positive with respect to cathode . . .	200★ max.	200★ max.	volts

Maximum Circuit Values:

	Triode Unit	Pentode Unit	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation .	0.5 max.	0.25 max.	megohm
For cathode-bias operation.	1 max.	1 max.	megohm

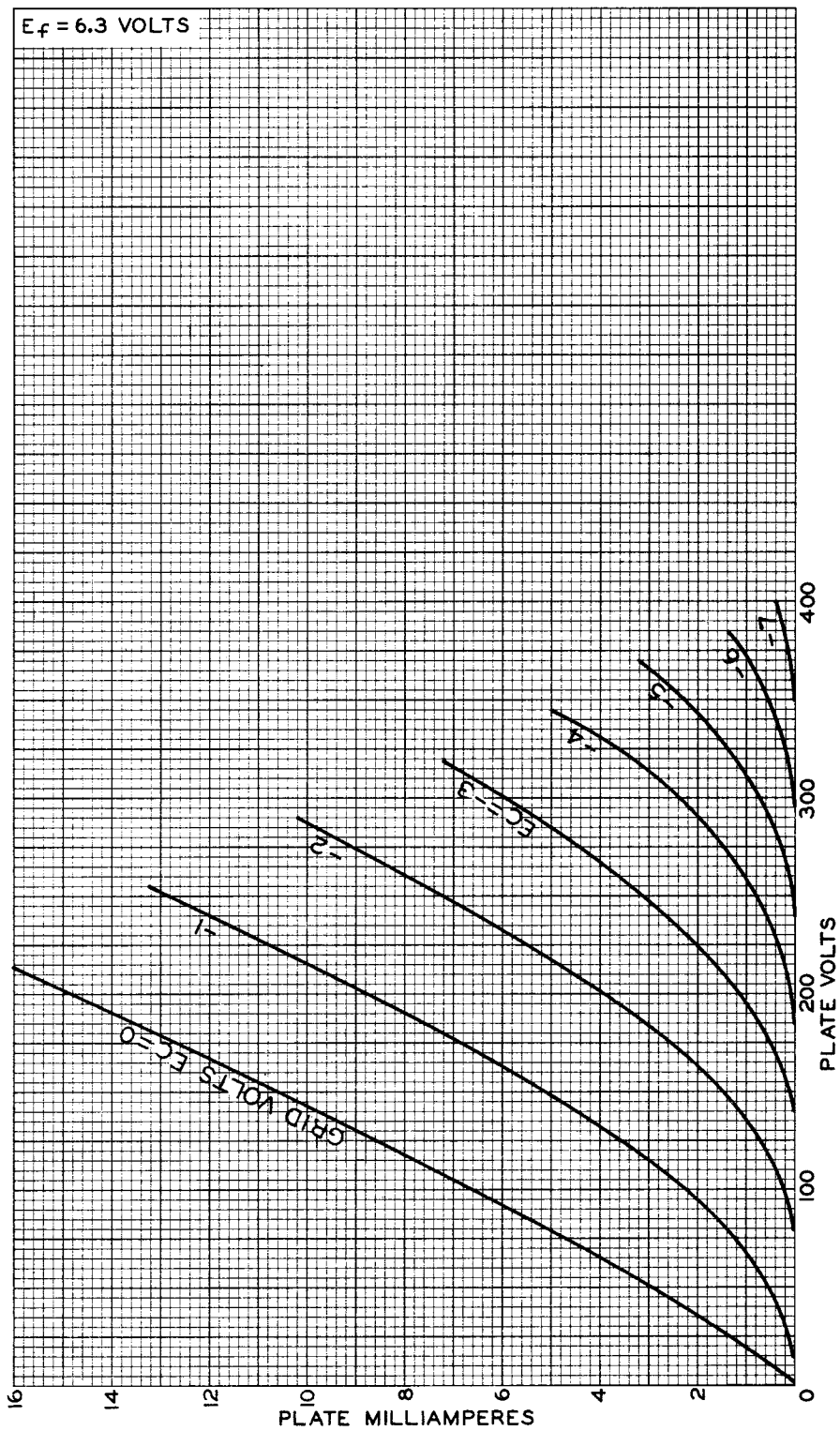


- ▲ Without external shield.
- This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.
- ★ The dc component must not exceed 100 volts.



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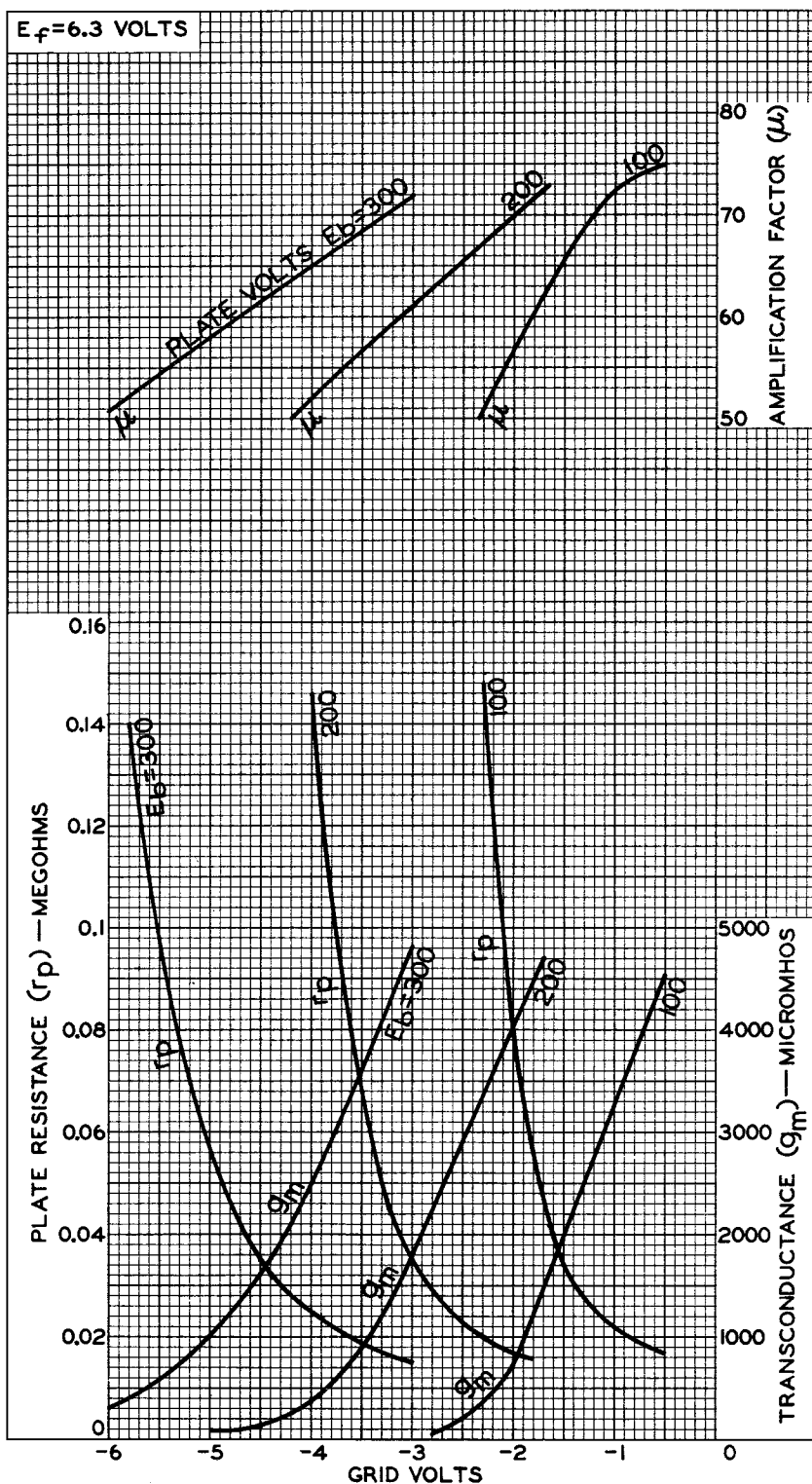
AVERAGE PLATE CHARACTERISTICS Triode Unit



92CM-8644



AVERAGE CHARACTERISTICS Triode Unit

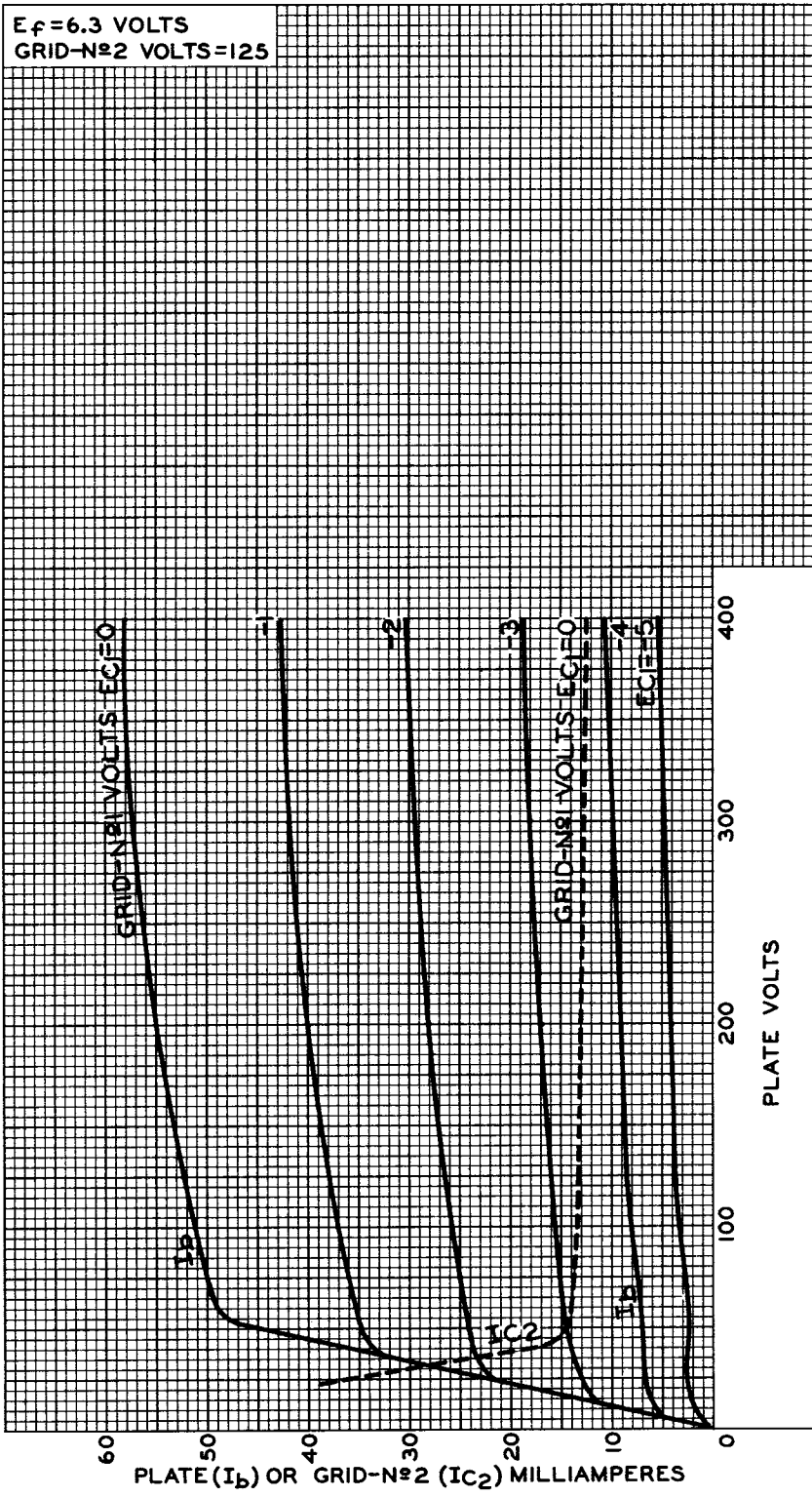


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AVERAGE CHARACTERISTICS Pentode Unit

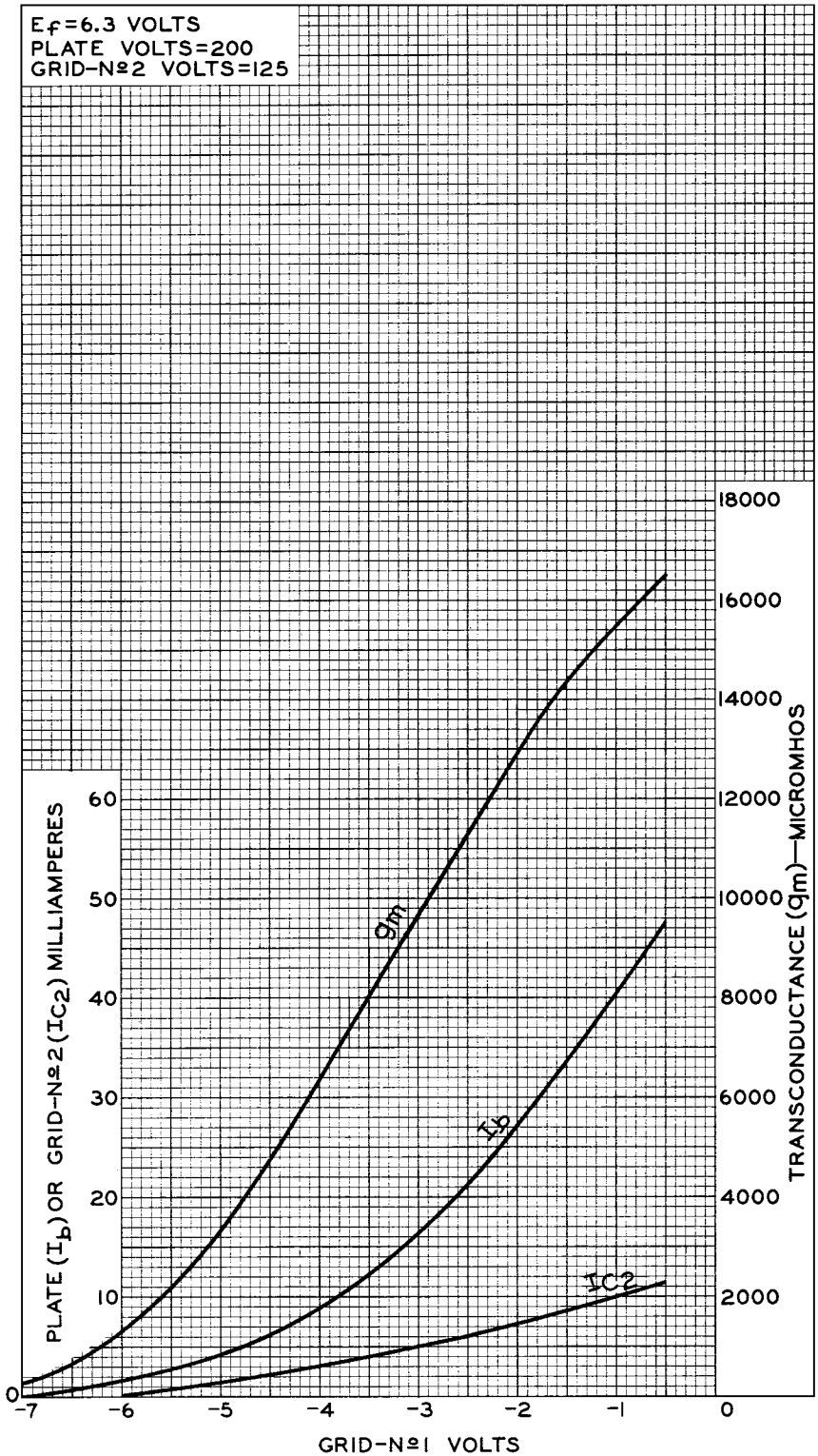


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AVERAGE CHARACTERISTICS Pentode Unit

$E_f = 6.3$ VOLTS
PLATE VOLTS = 200
GRID-N#2 VOLTS = 125



92CM-9905RI

