

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3 ± 10%	volts
Current at 6.3 volts.	0.75	amp

Direct Interelectrode Capacitances:^a

Triode Unit:

Grid to plate	4.4	μμf
Grid to cathode and heater.	2.4	μμf
Plate to cathode and heater	0.36	μμf

Pentode Unit:

Grid No.1 to plate.	0.1 max.	μμf
Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater. .	11	μμf
Plate to cathode & internal shield & grid No.3, grid No.2, and heater. . .	4.2	μμf
Triode grid to pentode plate.	0.018 max.	μμf
Pentode grid No.1 to triode plate	0.005 max.	μμf
Pentode plate to triode plate	0.17 max.	μμf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage.	250	60 200	volts
Grid-No.2 Supply Voltage.	—	150 150	volts
Grid-No.1 Voltage	-2	0 —	volts
Cathode Resistor.	—	— 100	ohms
Amplification Factor.	100	— —	
Plate Resistance (Approx.).	37000	— 60000	ohms
Transconductance.	2700	— 11500	μmhos
Plate Current	2	55 ^b 25	ma
Grid-No.2 Current	—	18 ^b 5.5	ma
Grid-No.1 Voltage (Approx.) for plate μa = 100.	—	— -10	volts
Grid Voltage (Approx.) for plate μa = 20	-5	— —	volts

Mechanical:

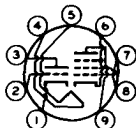
Operating Position.	Any
Maximum Overall Length.	2-5/8"
Maximum Seated Length.	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip).	2" ± 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See General Section
Bulb.	T6-1/2



6GN8

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



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 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
PLATE DISSIPATION	1 max.	5 max.	watts
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 Grid-No.2 Input	

Rating Chart at front of Receiving Tube Section

PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	200 max.	200 max.	volts
Heater positive with respect to cathode.	200 ^c max.	200 ^c 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

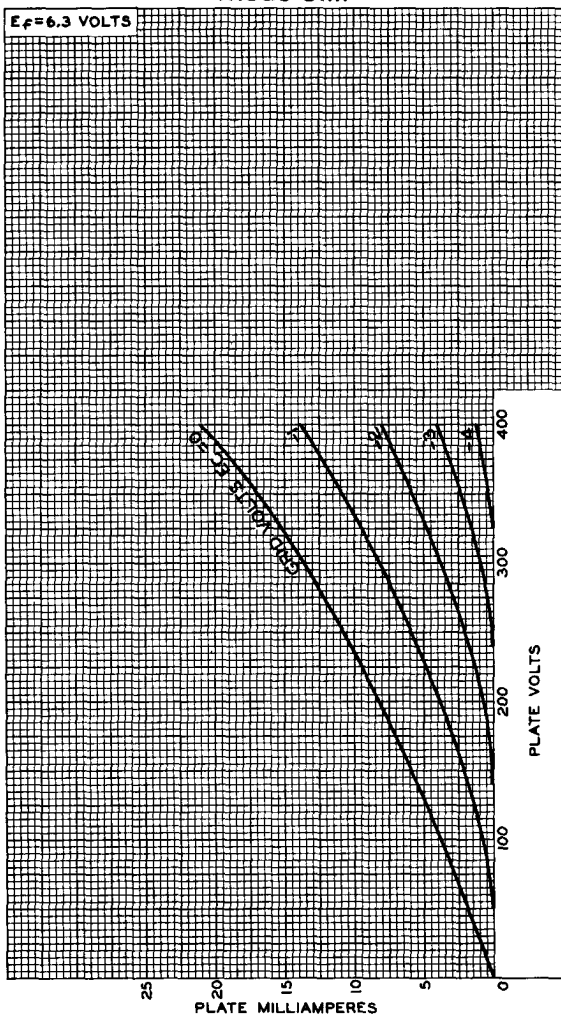
^a without external shield.

^b 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.

^c The dc component must not exceed 100 volts.



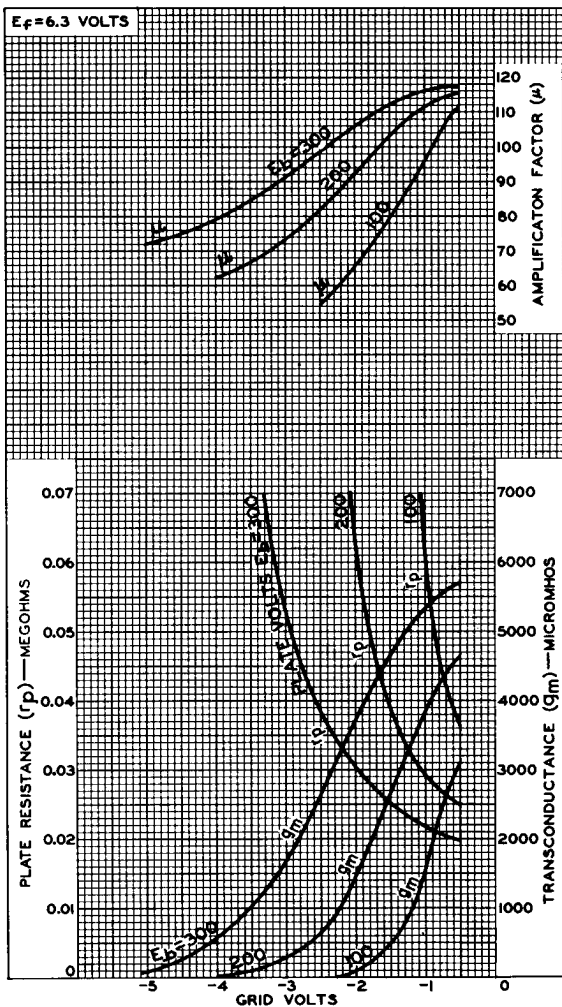
AVERAGE PLATE CHARACTERISTICS Triode Unit



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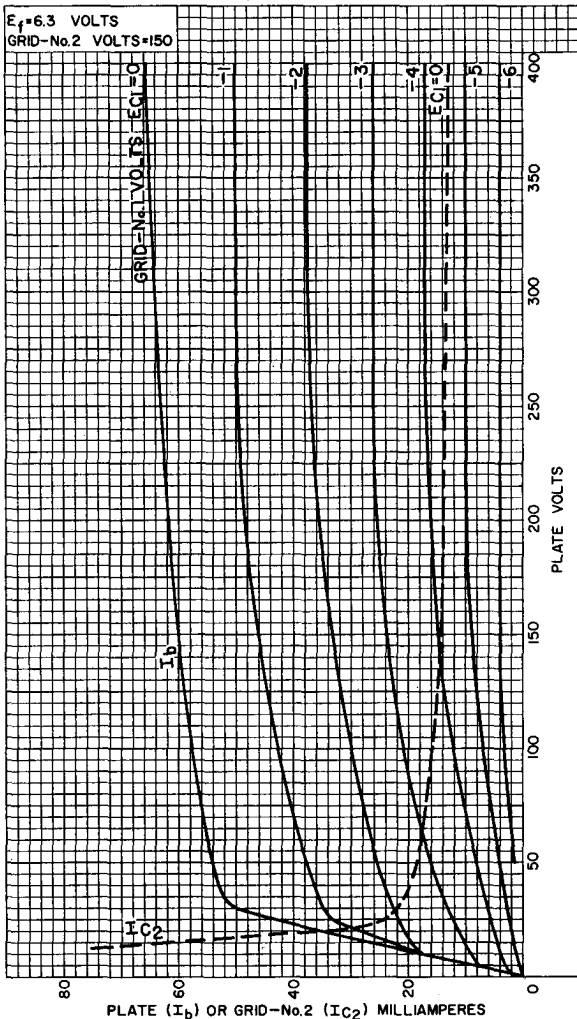
AVERAGE CHARACTERISTICS Triode Unit



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AVERAGE CHARACTERISTICS

Pentode Unit

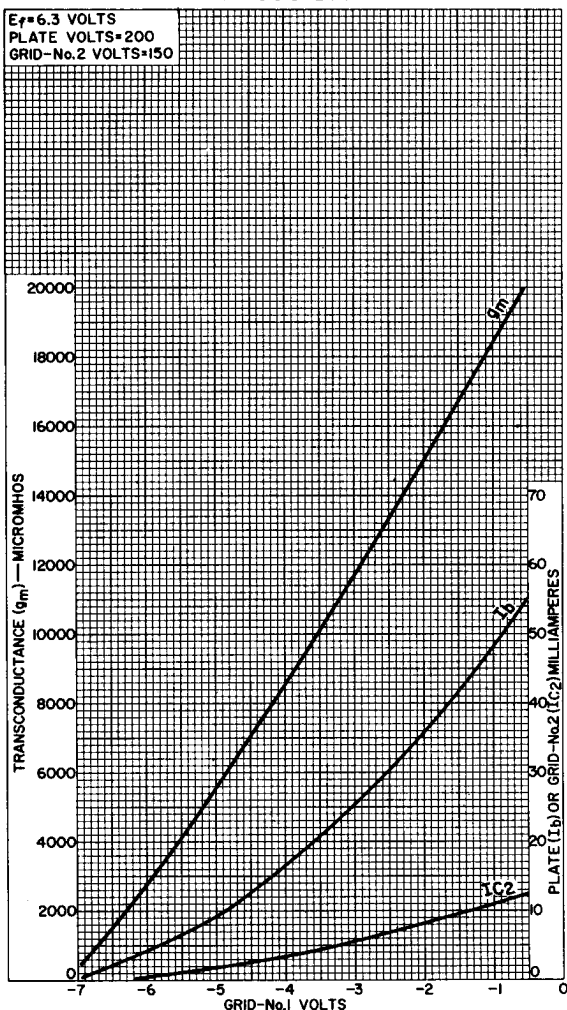


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AVERAGE CHARACTERISTICS Pentode Unit

$E_f = 6.3$ VOLTS
PLATE VOLTS = 200
GRID-No.2 VOLTS = 150



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