

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:^a

Triode Unit:

Grid to plate 4.4 μf

Grid to cathode and heater. 2.4 μf

Plate to cathode and heater 0.36 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. 11 μf

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

Triode grid to pentode plate. 0.018 max. μf

Pentode grid No.1 to triode plate 0.005 max. μf

Pentode plate to triode plate 0.17 max. μf

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 $\mu_a = 100$	—	— -10	volts
Grid Voltage (Approx.) for plate $\mu_a = 20$	-5	— —	volts

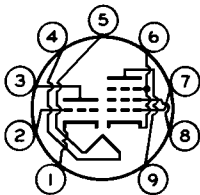
Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip).	2" $\pm$ 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
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 6-Pentode Cathode,
Pin 2-Triode Grid	Grid No.3,
Pin 3-Triode Plate	Internal Shield
Pin 4-Heater	Pin 7-Pentode Grid No.1
Pin 5-Heater	Pin 8-Pentode Grid No.2
	Pin 9-Pentode Plate



AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

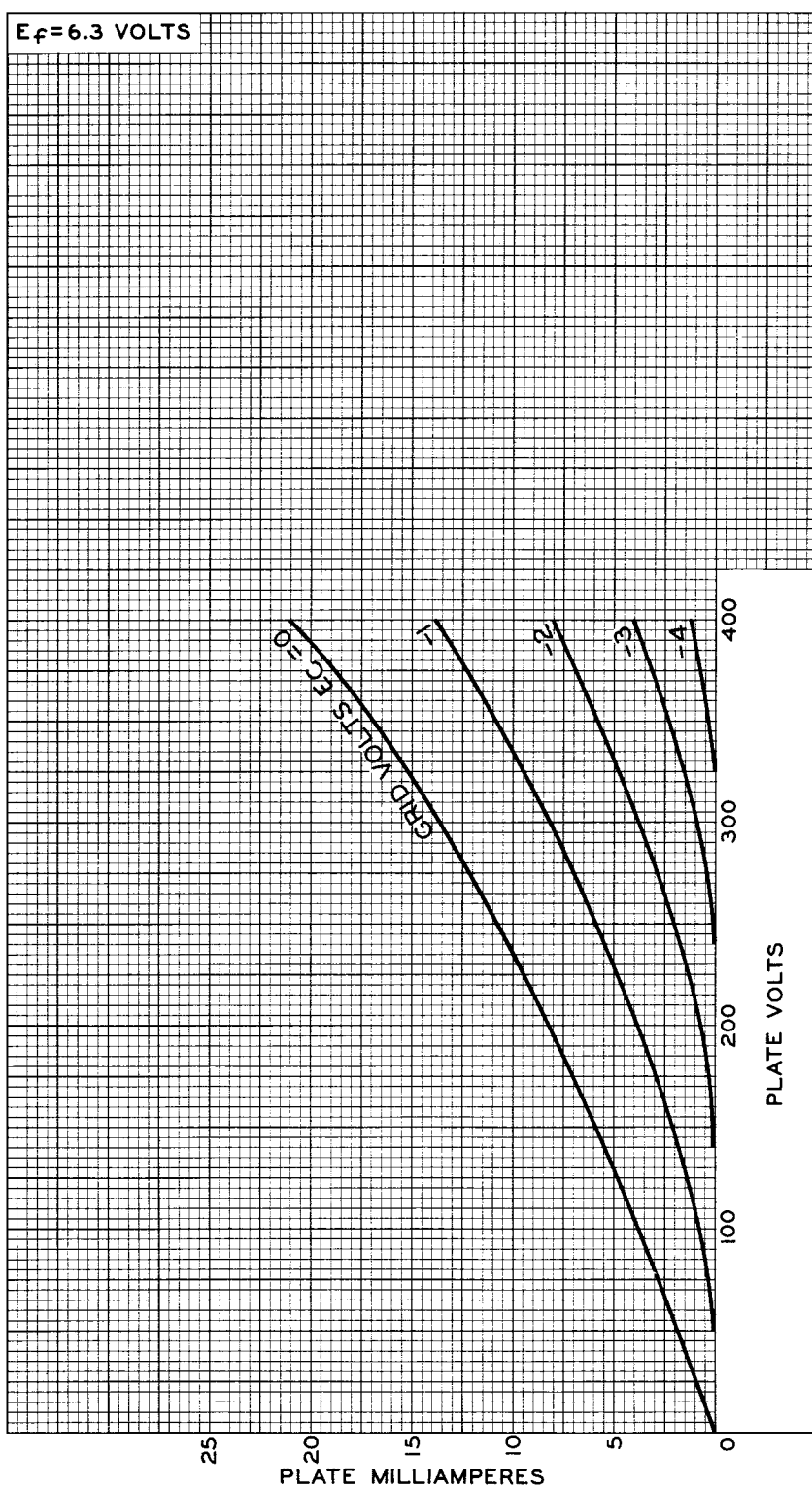
	Triode Unit	Pentode Unit	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	—	330 max.	volts
GRID-No.2 VOLTAGE	—	See Grid-No.2 Input	
Rating Chart at front of Receiving Tube Section			
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0 max.	0 max.	volts
PLATE DISSIPATION	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

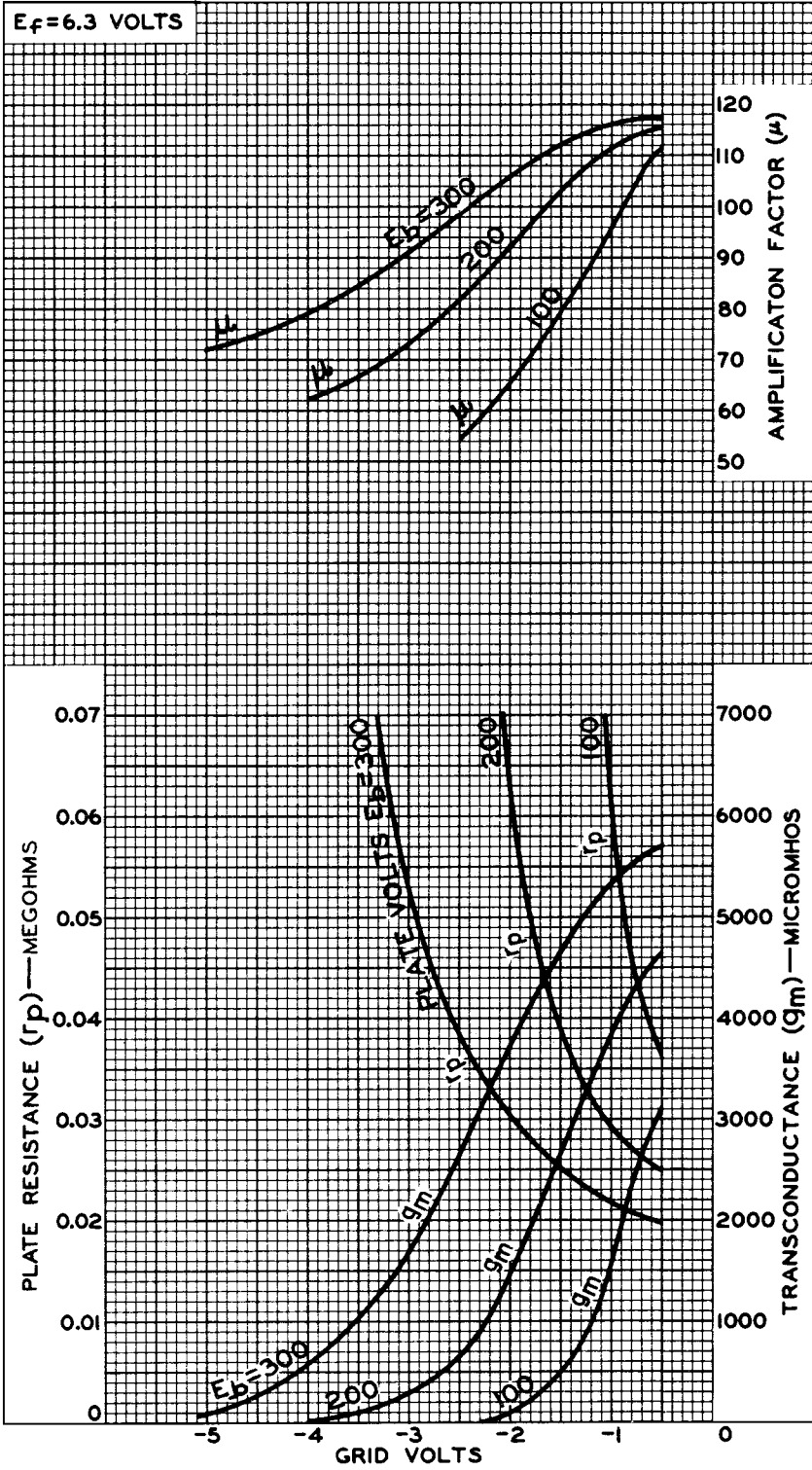


92CM-9907R1



6GN8

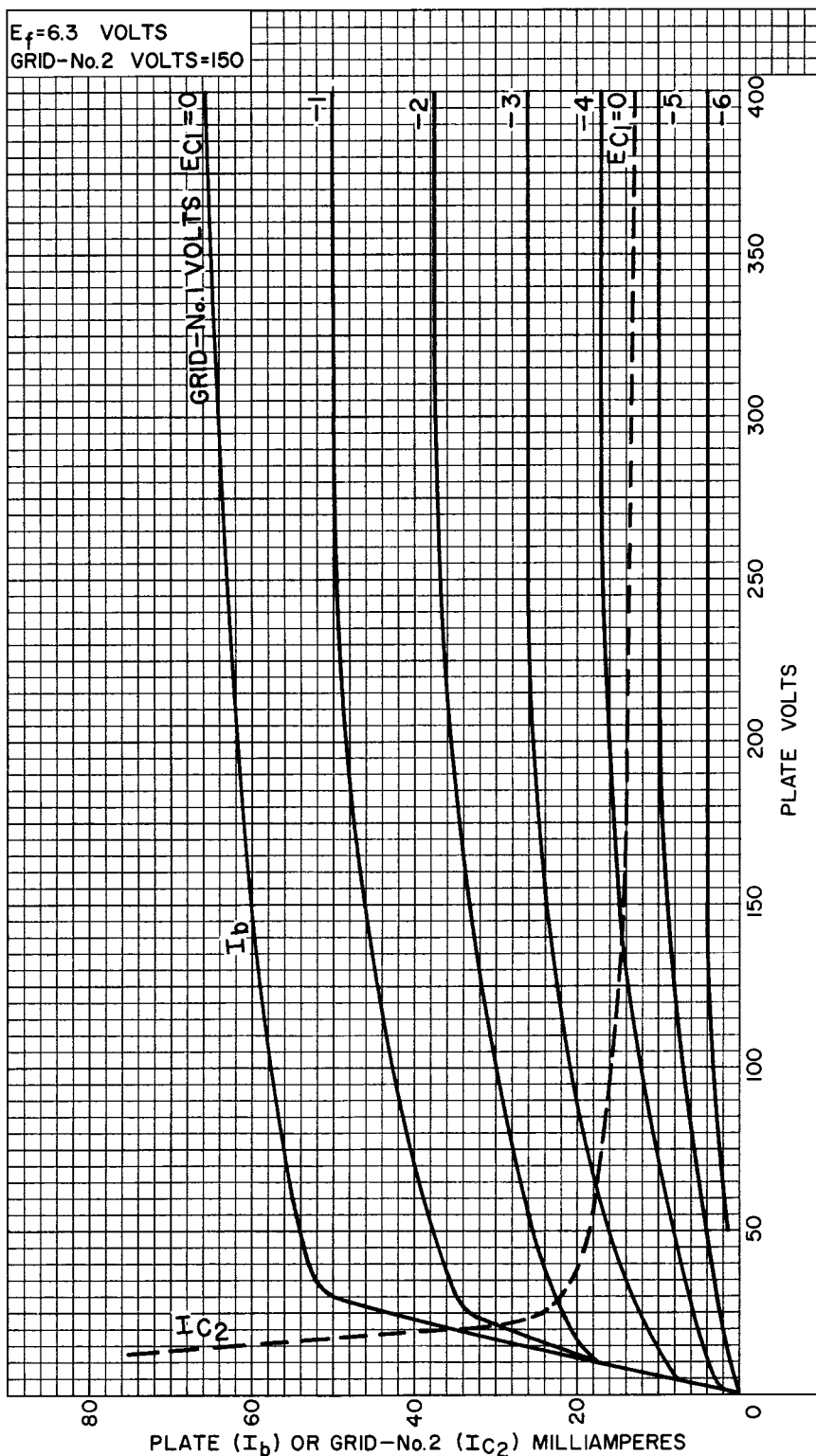
AVERAGE CHARACTERISTICS Triode Unit



92CM-11025



AVERAGE CHARACTERISTICS Pentode Unit

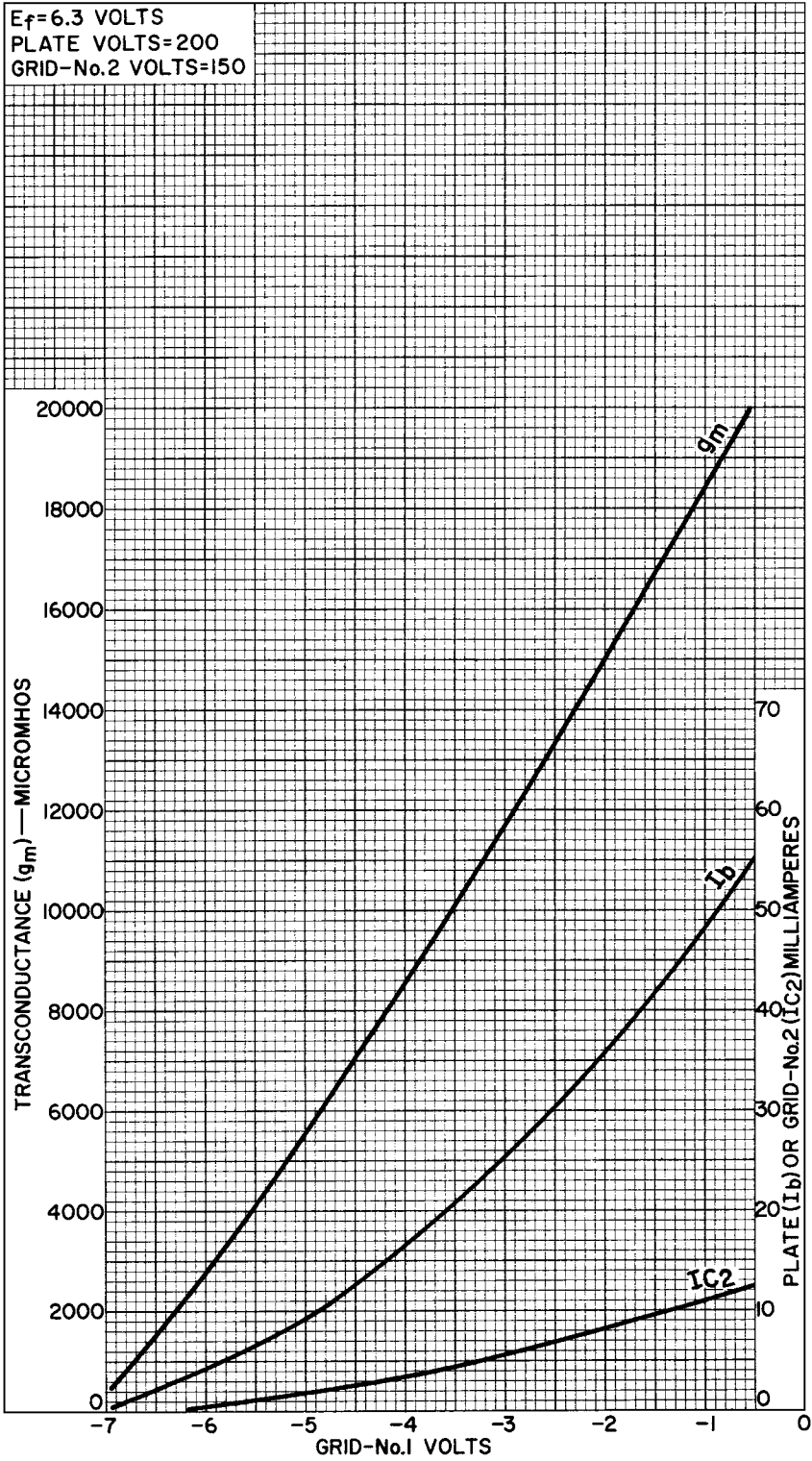


92CM-11021



6GN8

AVERAGE CHARACTERISTICS Pentode Unit



92CM-11022

