

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:▲

Triode Unit:

Grid to plate	1.5	μf
Grid to cathode and heater	2	μf
Plate to cathode and heater	0.26	μf

Pentode Unit:

Grid No.1 to plate	0.04 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	7	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.4	μf
Triode grid to pentode plate	0.02 max.	μf
Pentode grid No.1 to triode plate	0.02 max.	μf
Pentode plate to triode plate	0.15 max.	μf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage	150	125	volts
Grid-No.2, Supply Voltage	—	125	volts
Grid-No.1 Supply Voltage	-3	0	volts
Cathode Resistor	0	56	ohms
Amplification Factor	21	—	
Plate Resistance (Approx.)	4700	170000	ohms
Transconductance	4500	7800	μmhos
Plate Current	15	12	ma
Grid-No.2 Current	—	3.8	ma
Grid-No.1 Voltage (Approx.) for plate $\mu a = 20$	-17	-6	volts
Grid-No.1 Voltage (Approx.) for plate $ma = 1.6$, and cathode resistor (ohms) = 0	—	-3	volts

Mechanical:

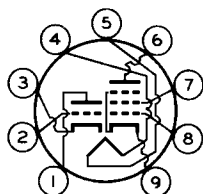
Operating Position	Any
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"



6AN8-A

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. 9DA

Pin 1 - Triode Plate
 Pin 2 - Triode Grid
 Pin 3 - Triode Cathode
 Pin 4 - Heater
 Pin 5 - Heater
 Pin 6 - Pentode Plate
 Pin 7 - Pentode Grid No.2



Pin 8 - Pentode Grid No.1
 Pin 9 - Pentode Grid No.3, Pentode Cathode, Internal Shield

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 [•] 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

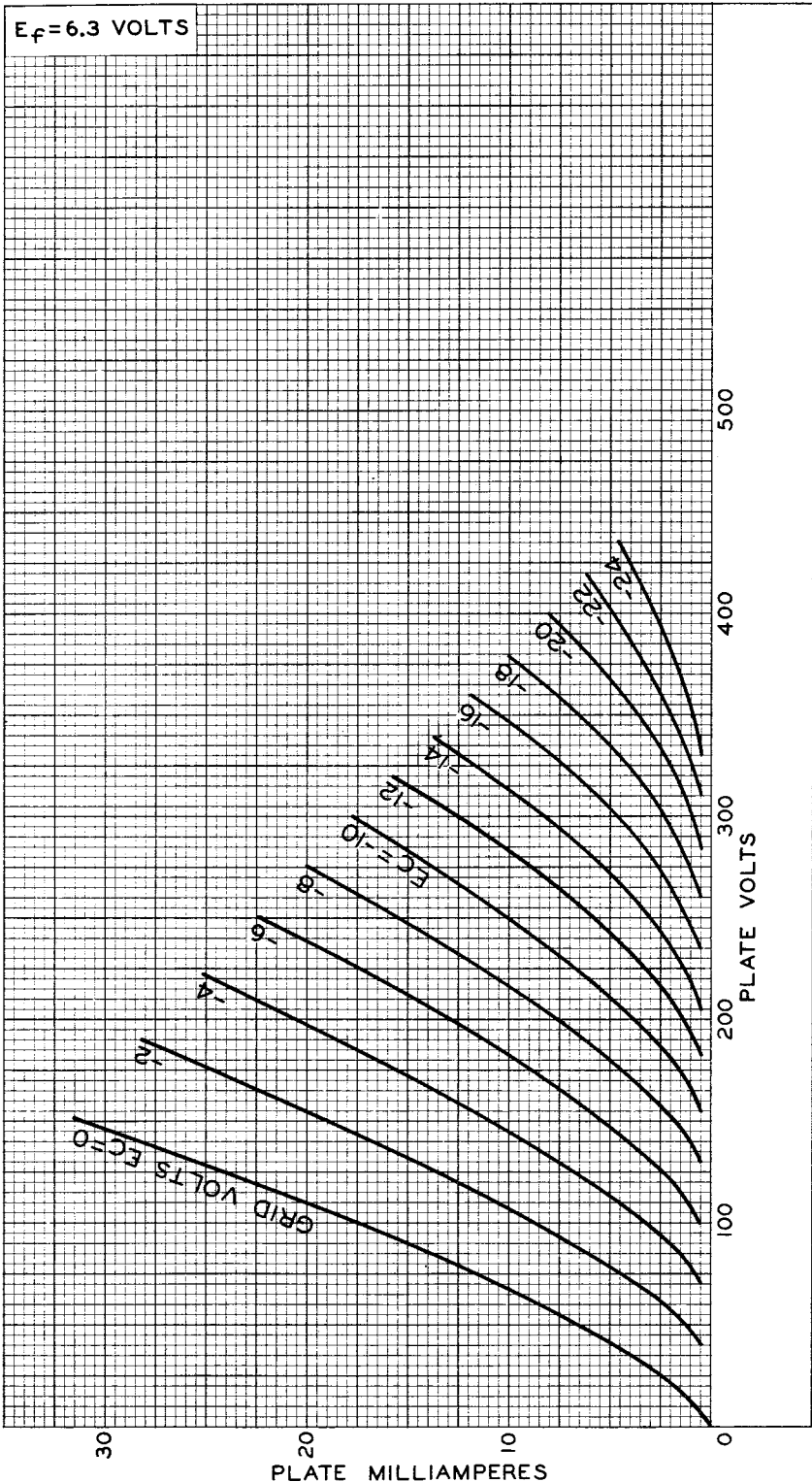
▲ Without external shield.

● The dc component must not exceed 100 volts.

★ If either unit is operated at maximum-rated conditions, grid-No.1-circuit resistances for both units should not exceed the stated values.



AVERAGE PLATE CHARACTERISTICS Triode Unit

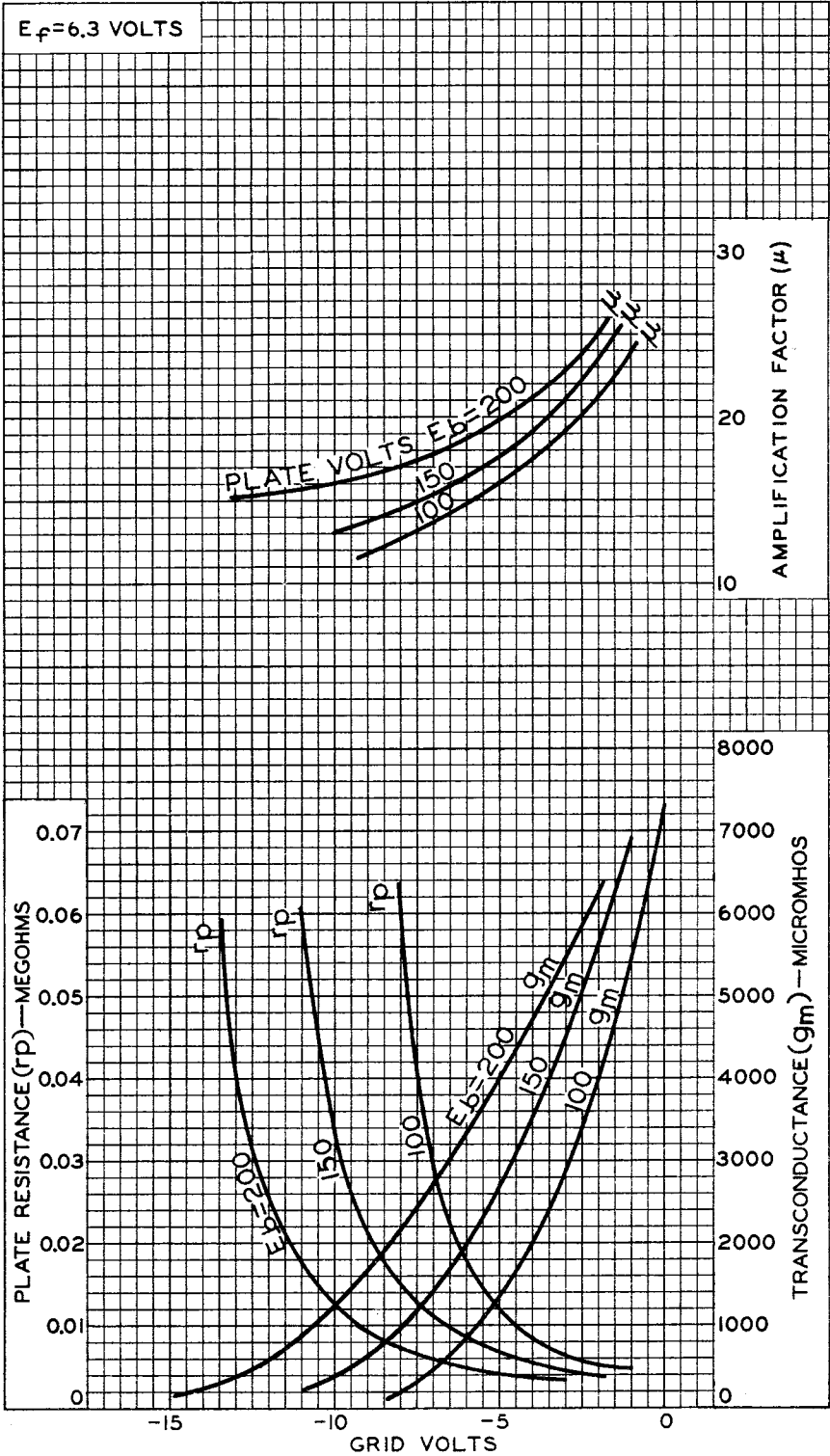


92CM-8209



6AN8-A

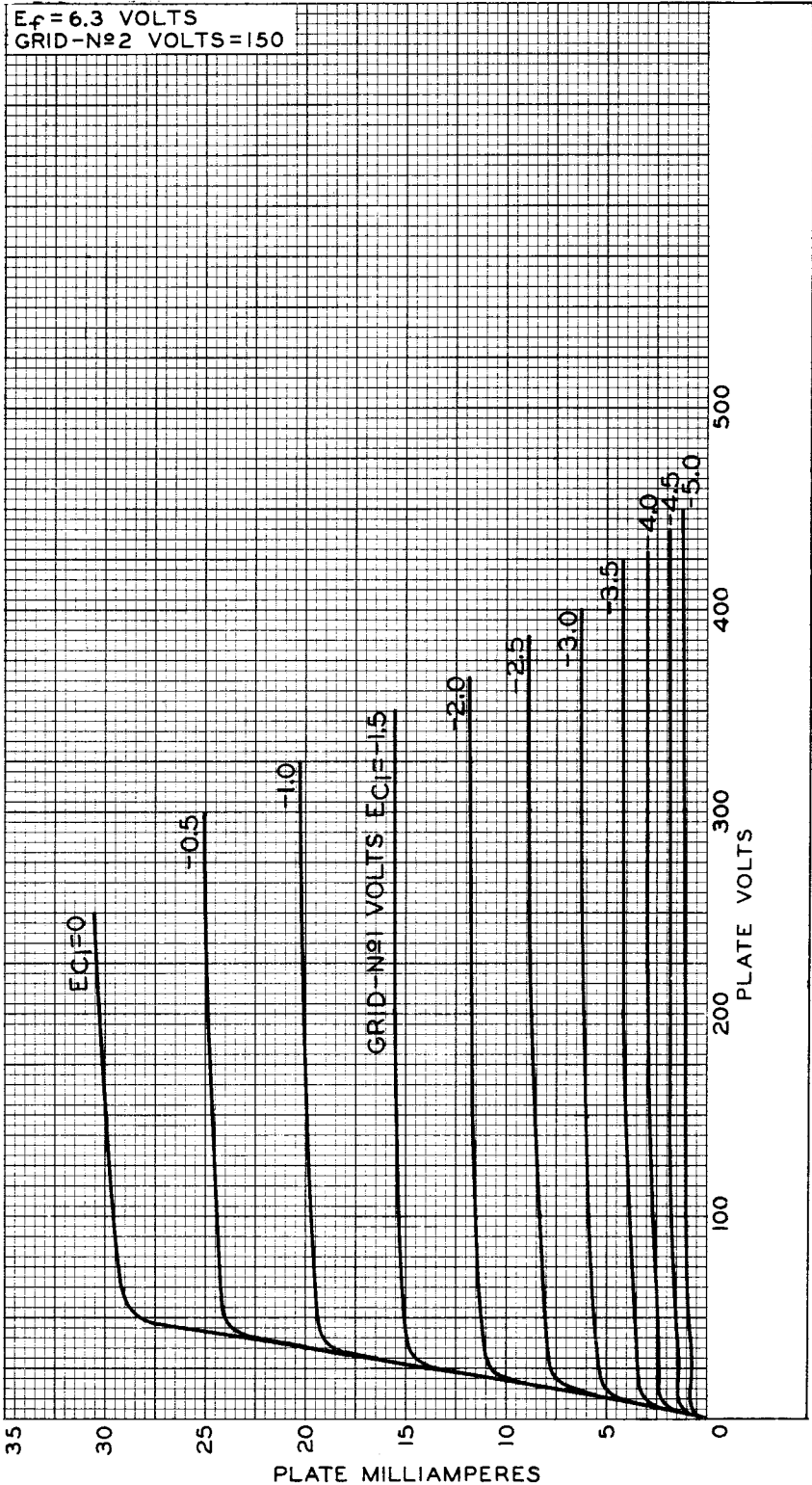
AVERAGE CHARACTERISTICS Triode Unit



92CM-8207RI



AVERAGE PLATE CHARACTERISTICS Pentode Unit

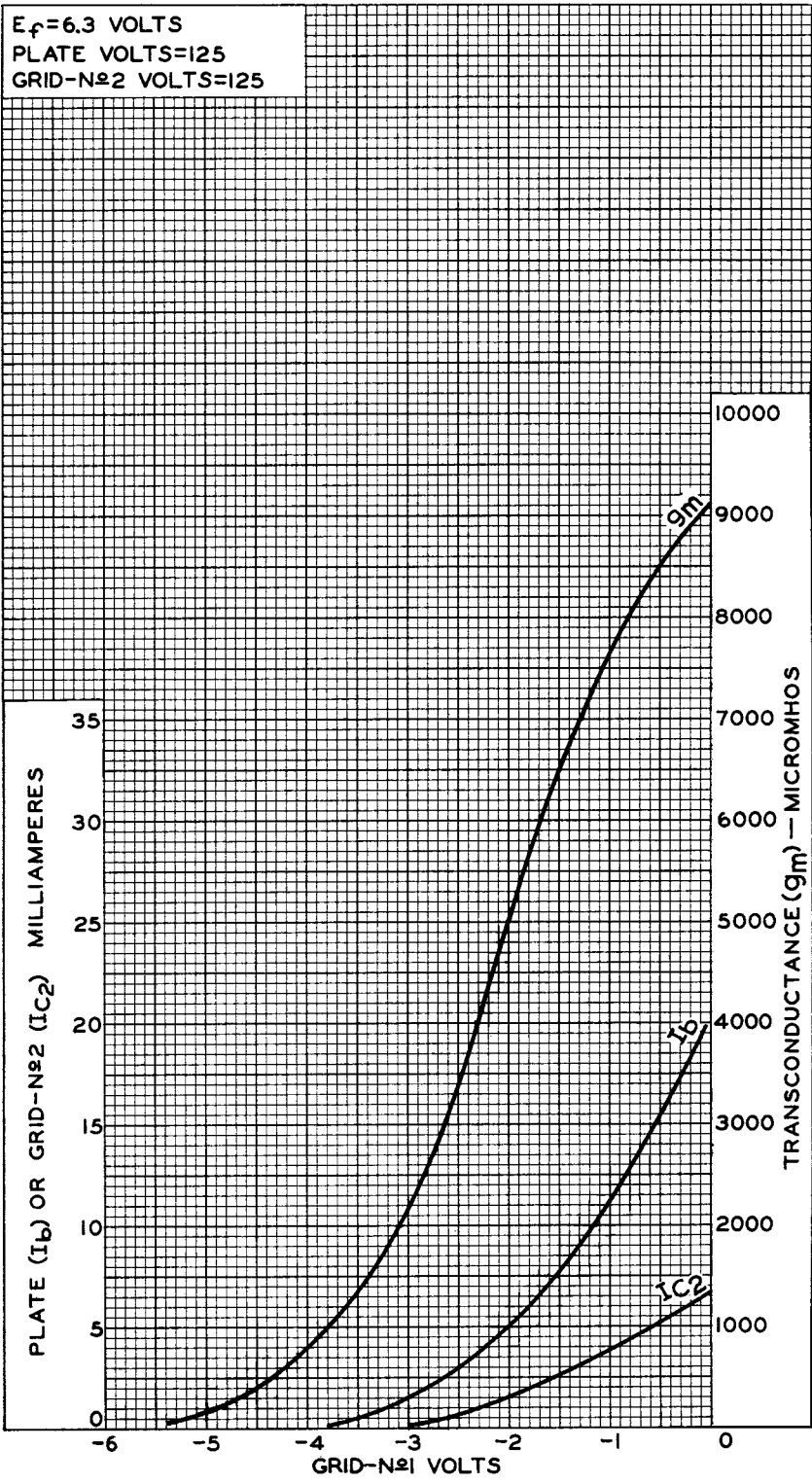


92CM-8206



6AN8-A

AVERAGE CHARACTERISTICS Pentode Unit



92CM-8208RI

