

Medium-Mu Triode— Semiremote-Cutoff Pentode

9-PIN MINIATURE TYPE

SEPARATE CATHODE BASE-PIN CONNECTIONS

For Color and Black-and-White TV Receivers. Pentode Unit is Particularly Suited for Burst-Amplifier Circuit in Color TV. Triode Unit is Useful as a General-Purpose Amplifier.

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.450	amp
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 ^a max.	volts

Direct Interelectrode Capacitances:^b

Triode Unit:

Grid to plate	1.8	pf
Input: G_T to $(K_T, K_P + G_{3P} + IS, H)$	3.2	pf
Output: P_T to $(K_T, K_P + G_{3P} + IS, H)$	1.9	pf

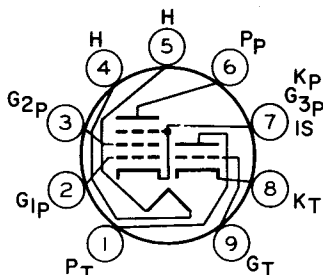
Pentode Unit:

Grid No.1 to plate	0.015 max.	pf
Input: G_{1P} to $(K_P + G_{3P} + IS, G_{2P}, H)$	5.5	pf
Output: P_P to $(K_P + G_{3P} + IS, G_{2P}, H)$	3.8	pf
Heater to cathode (Each unit)	3.2	pf

Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length from Base Seat to Bulb Top (Excluding Tip)	1-9/16" ± 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	9AE

- Pin 1—Triode Plate
 Pin 2—Pentode Grid No.1
 Pin 3—Pentode Grid No.2
 Pin 4—Heater
 Pin 5—Heater
 Pin 6—Pentode Plate
 Pin 7—Pentode Cathode,
 Pentode Grid No.3,
 and Internal Shield
 Pin 8—Triode Cathode
 Pin 9—Triode Grid



6LM8

AMPLIFIER — Class A₁

Triode
Unit

Pentode
Unit

Characteristics:

Plate Voltage.	125	125	volts
Grid-No.2 Voltage.	—	125	volts
Grid-No.1 Voltage.	—1	—2	volts
Amplification Factor	46	—	
Plate Resistance (Approx.) . . .	5400	150000	ohms
Transconductance	8500	6000	μmhos
Plate Current.	13.5	12	ma
Grid-No.2 Current.	—	4	ma
Grid-No.1 Voltage (Approx.) for plate $\mu a = 10$	—8	—14	volts

Maximum Ratings, Design-Maximum Values:

Plate Voltage.	330 max.	350 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.	—	0.55 max.	watt
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.	2.5 max.	2.5 max.	watts

Maximum Circuit Values:

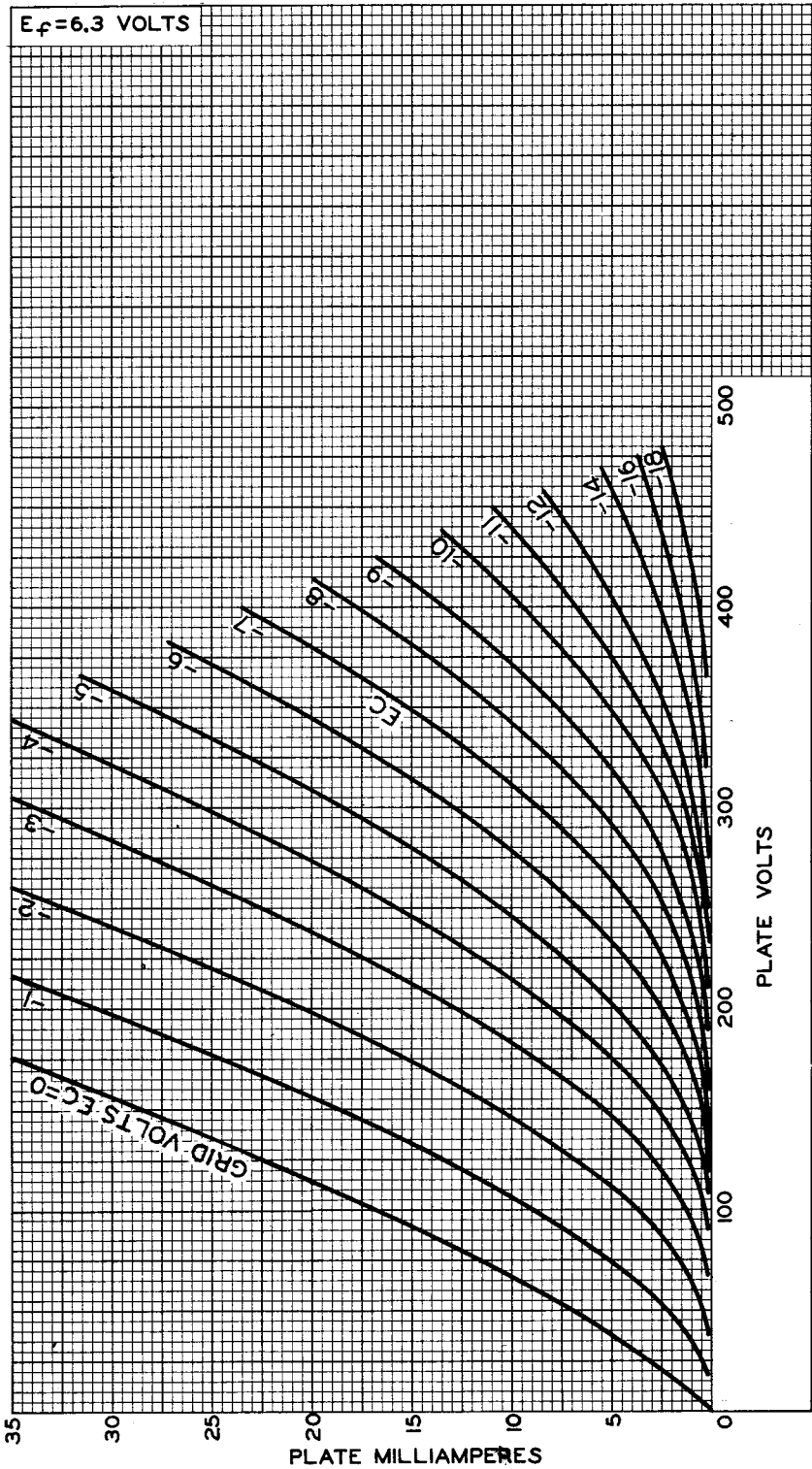
Grid-No.1-Circuit Resistance:			
For fixed-bias operation . . .	0.5 max.	0.25 max.	megohm
For cathode-bias operation . .	1 max.	0.5 max.	megohm

^a The dc component must not exceed 100 volts.

^b With external shield JEDEC No.315 measured in accordance with EIA Standard RS-191-A.



AVERAGE PLATE CHARACTERISTICS Triode Unit

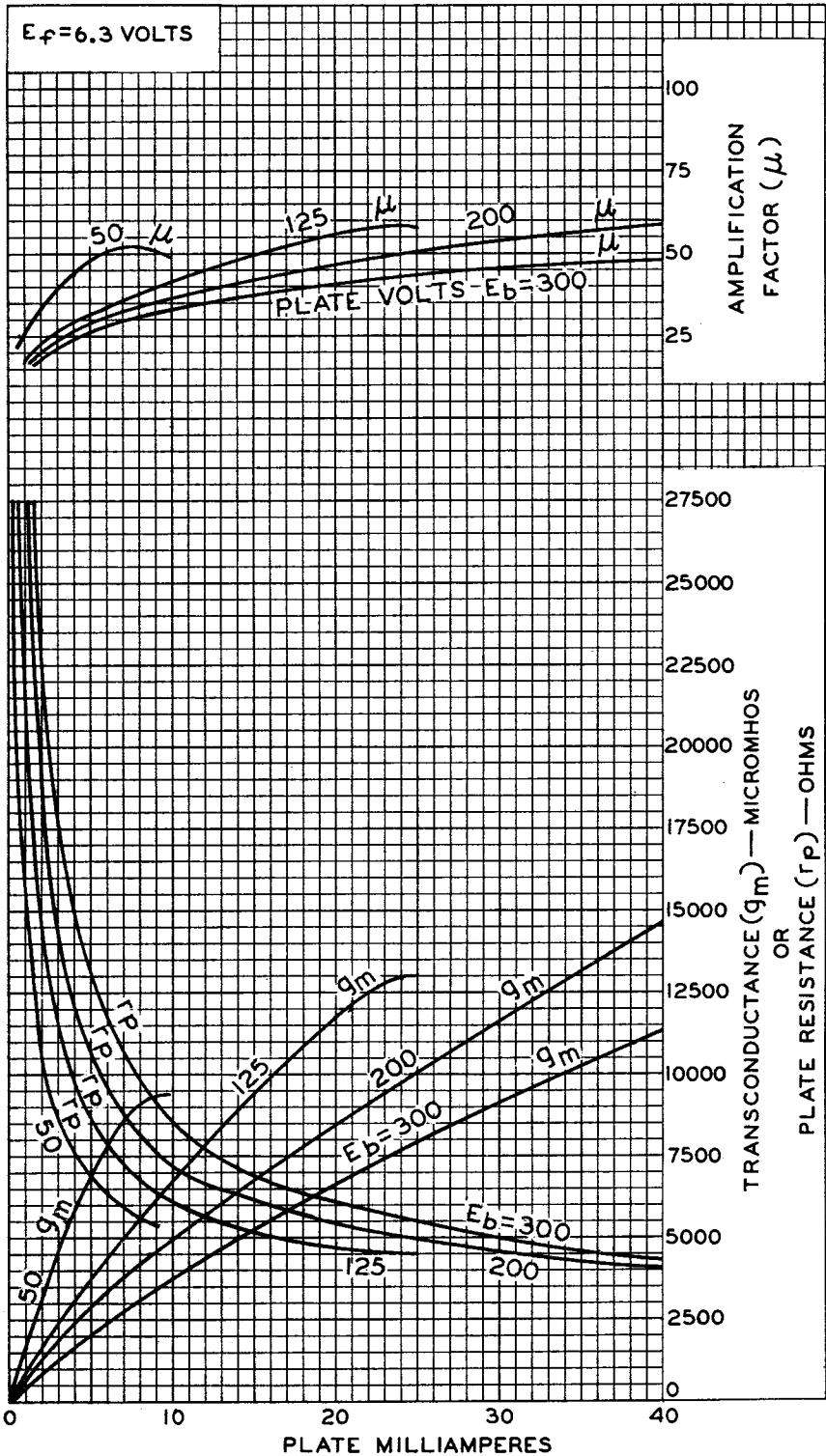


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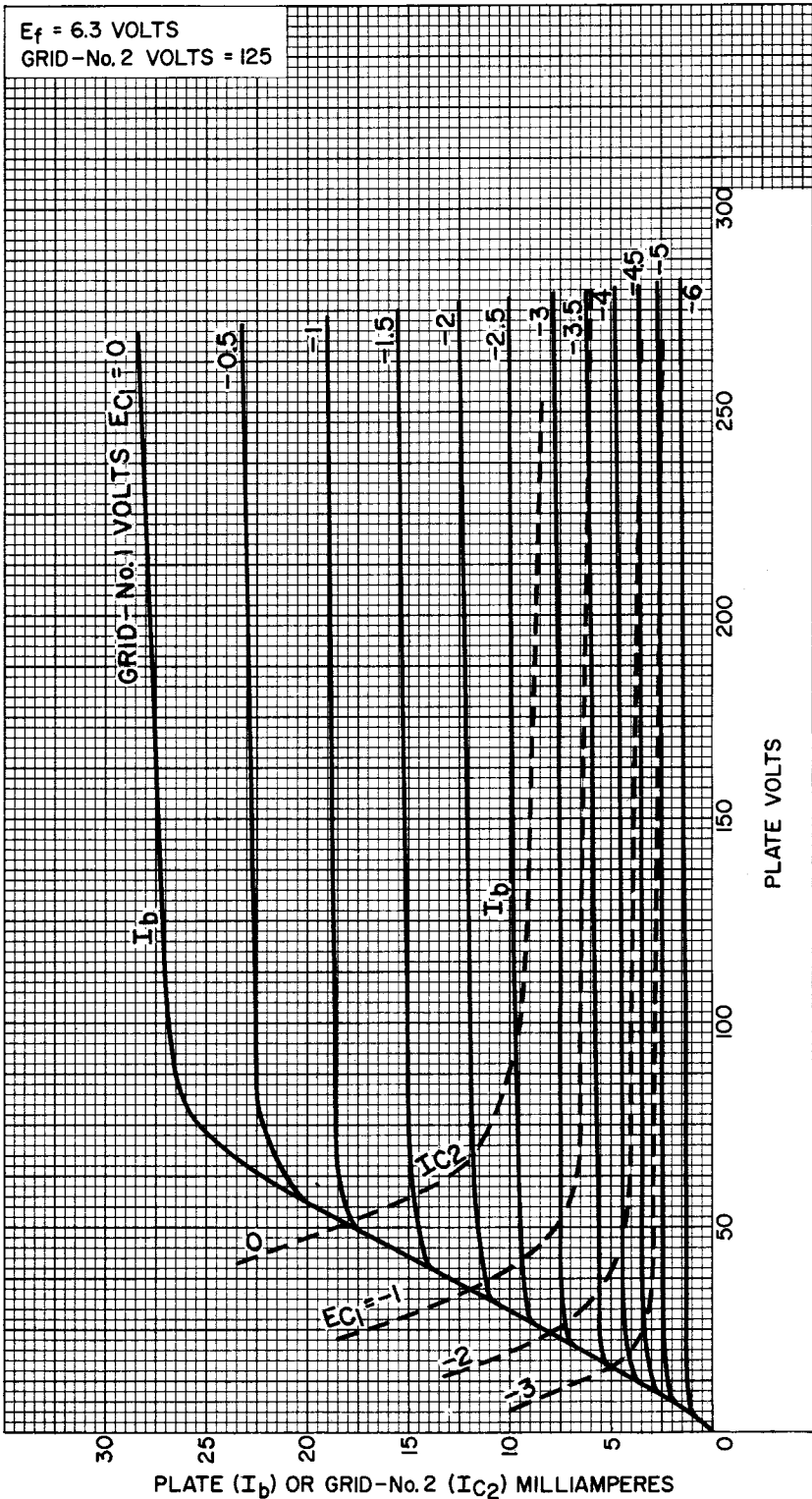
AVERAGE CHARACTERISTICS Triode Unit



92CM-10428



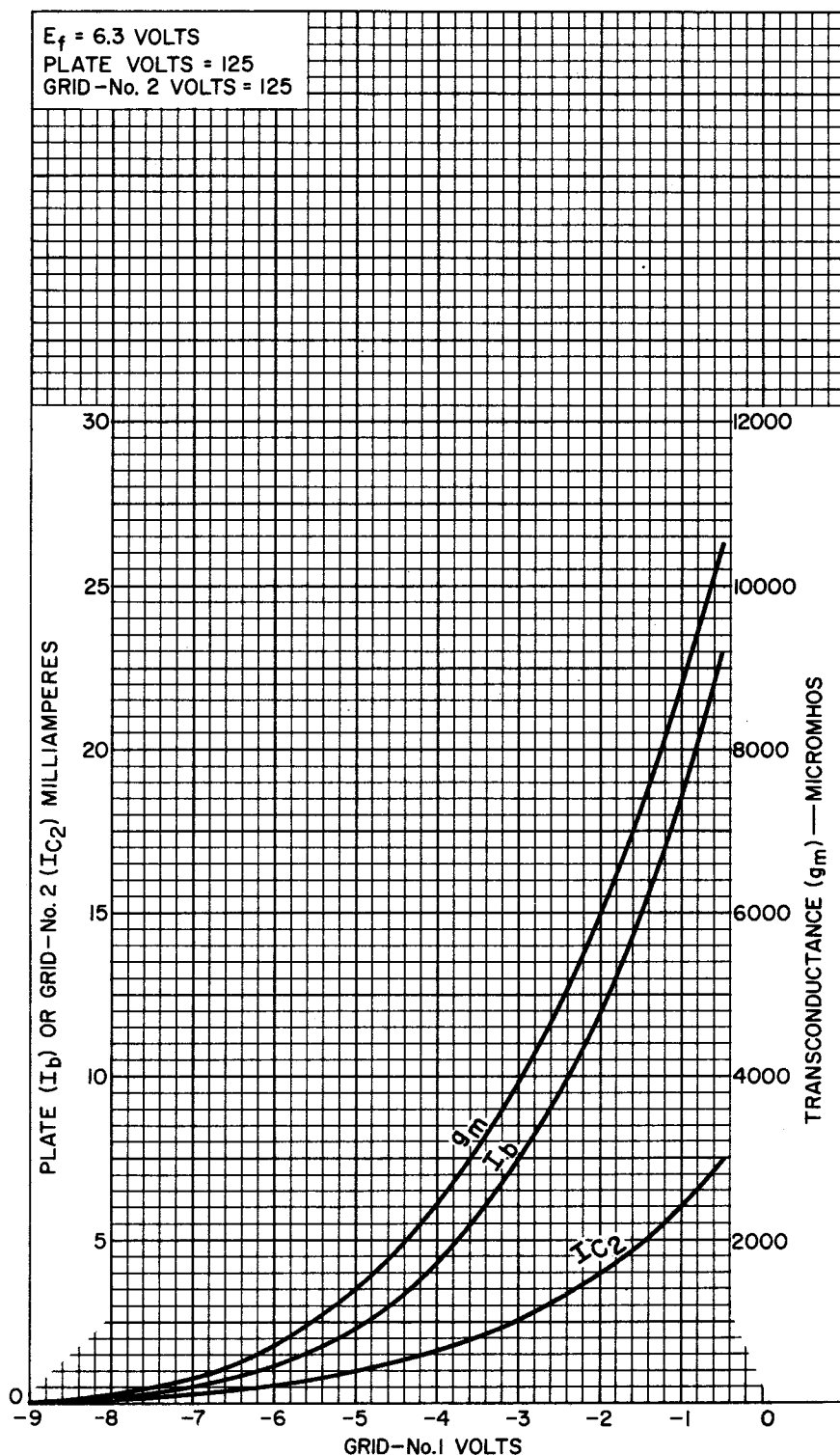
AVERAGE CHARACTERISTICS Pentode Unit



92CM-12560



AVERAGE CHARACTERISTICS Pentode Unit



92CM-12558

