

Medium-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current at 6.3 volts.	0.45 ± 6%	amp
Warm-up time (Average).	11	sec

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield [▲]	
<i>Triode Unit:</i>			
Grid to plate.	1.6	1.6	μf
Grid to cathode, pentode grid No.3 & pentode cathode & internal shield, and heater . . .	3.4	3.6	μf
Plate to cathode, pentode grid No.3 & pentode cathode & internal shield, and heater . . .	1.7	2.2	μf
Heater to cathode.	3	3*	μf
<i>Pentode Unit:</i>			
Grid No.1 to plate	0.02 max.	0.015 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	5.5	5.5	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater. .	2.6	3.4	μf
Heater to cathode & grid No.3 & internal shield .	3	3*	μf

Characteristics, Class A₁ Amplifier:

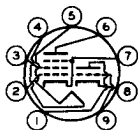
	Triode Unit	Pentode Unit	
Plate Voltage.	125	125	volts
Grid-No.2 Voltage.	—	125	volts
Grid-No.1 Voltage.	-1	-1	volt
Amplification Factor	46	—	
Plate Resistance (Approx.)	5400	200000	ohms
Transconductance	8500	7500	μmhos
Plate Current.	13.5	12	ma
Grid-No.2 Current.	—	4	ma
Grid-No.1 Voltage (Approx.) for plate $\mu_a = 10$	-8	-8	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" $\pm$ 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. 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,
 Internal
 Shield
 Pin 8-Triode Cathode
 Pin 9-Triode Grid

HORIZONTAL-DEFLECTION OSCILLATOR

Maximum Ratings, Design-Maximum Values:

*For operation in a 525-line, 30-frame system**

	Triode Unit	Pentode Unit	
PLATE VOLTAGE.	330 max.	350 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	-	330 max.	volts
GRID-No.2 VOLTAGE.	-	See Grid-No.2 Input	
<i>Rating Chart at front of Receiving Tube Section</i>			
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value. . .	0 max.	0 max.	volts
Peak-negative value. . .	-	175 max.	volts
CATHODE CURRENT:			
Peak.	-	300 max.	ma
Average.	-	20 max.	ma
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	
<i>Rating Chart at front of Receiving Tube Section</i>			
PLATE DISSIPATION.	2.5 max.	2.5 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:

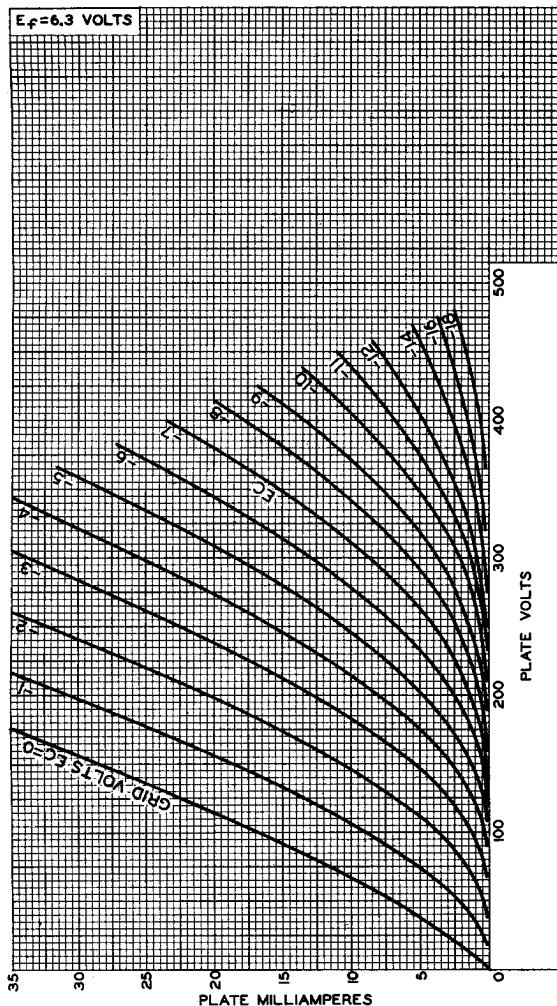
	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Grid-No.1-Circuit Resistance: For fixed-bias or cathode- bias operation.	2.2 max.	2.2 max.	megohms

- ▲ With external shield JEDEC No.315 connected to cathode of unit under test except as noted.
- With external shield JEDEC No.315 connected to ground.
- ★ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.
- ◆ The dc component must not exceed 100 volts.



6GH8

AVERAGE PLATE CHARACTERISTICS Triode Unit

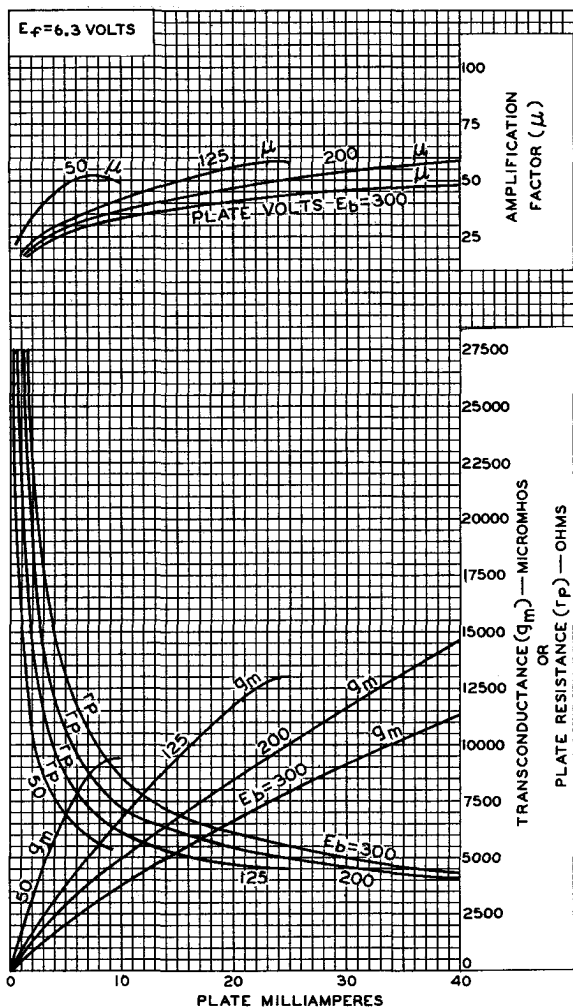


92CM-10421RI



AVERAGE CHARACTERISTICS

Triode Unit

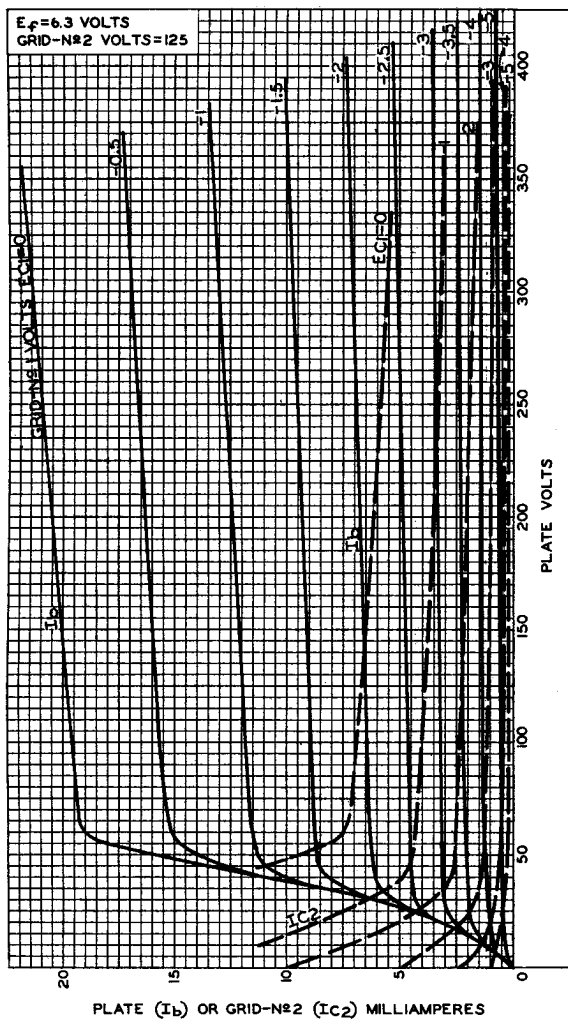


92CM-10428



6GH8

AVERAGE CHARACTERISTICS Pentode Unit

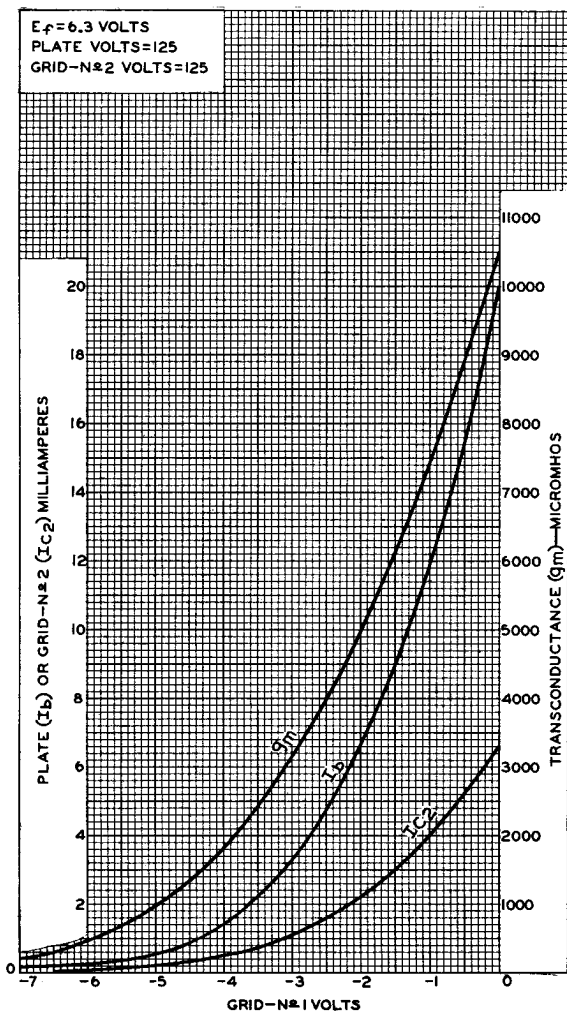


92CM-10436



AVERAGE CHARACTERISTICS Pentode Unit

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



92CM-10417

