

Medium-Mu Triode— Sharp-Cutoff Tetrode

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	$0.45 \pm 6\%$	amp ←
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield [▲]	
<i>Triode Unit:</i>			
Grid to plate	1.8	1.8	μf
Grid to cathode and heater	2.7	2.7	μf
Plate to cathode and heater	0.4	1.2	μf
<i>Tetrode Unit:</i>			
Grid No.1 to plate	0.019 max.	0.015 max.	μf
Grid No.1 to cathode & internal shield, grid No.2, and heater	5	5	μf
Plate to cathode & internal shield, grid No.2, and heater	2.5	3.3	μf
Tetrode plate to triode plate	0.07 max.	0.01 max.	μf
Heater to cathode (Each unit)	3	3 [•]	μf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Tetrode Unit	
Plate Supply Voltage	125	125	volts
Grid-No.2 Supply Voltage	—	125	volts
Grid-No.1 Supply Voltage	—	-1	volt
Cathode Resistor	56	—	ohms
Amplification Factor	40	—	
Plate Resistance (Approx.)	5000	140000	ohms
Transconductance	8000	5800	μmhos
Plate Current	15	12	ma
Grid-No.2 Current	—	4.2	ma
Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 100$	-7	-7	volts

Mechanical:

Operating Position Any

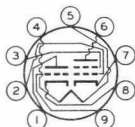
← Indicates a change.



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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 <i>General Section</i>
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW.	9GE

Pin 1 - Triode Plate
 Pin 2 - Tetrode
 Grid No.1
 Pin 3 - Tetrode
 Grid No.2
 Pin 4 - Heater
 Pin 5 - Heater
 Pin 6 - Tetrode Plate



Pin 7 - Tetrode
 Cathode,
 Internal
 Shield
 Pin 8 - Triode
 Cathode
 Pin 9 - Triode
 Grid

AMPLIFIER — Class A₁

→ Maximum Ratings, Design-Maximum Values:

	Triode Unit	Tetrode Unit	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	-	330 max.	volts
GRID-No.2 VOLTAGE	-	See <i>Grid-No.2 Input</i>	
<i>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	-	0.7 max.	watt
For grid-No.2 voltages between 165 and 330 volts		See <i>Grid-No.2 Input</i>	
<i>Rating Chart</i> at front of Receiving Tube Section			
GRID INPUT.	0.55 max.	-	watt
PLATE DISSIPATION	3.1 max.	3.2 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	Tetrode 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

→ Indicates a change.

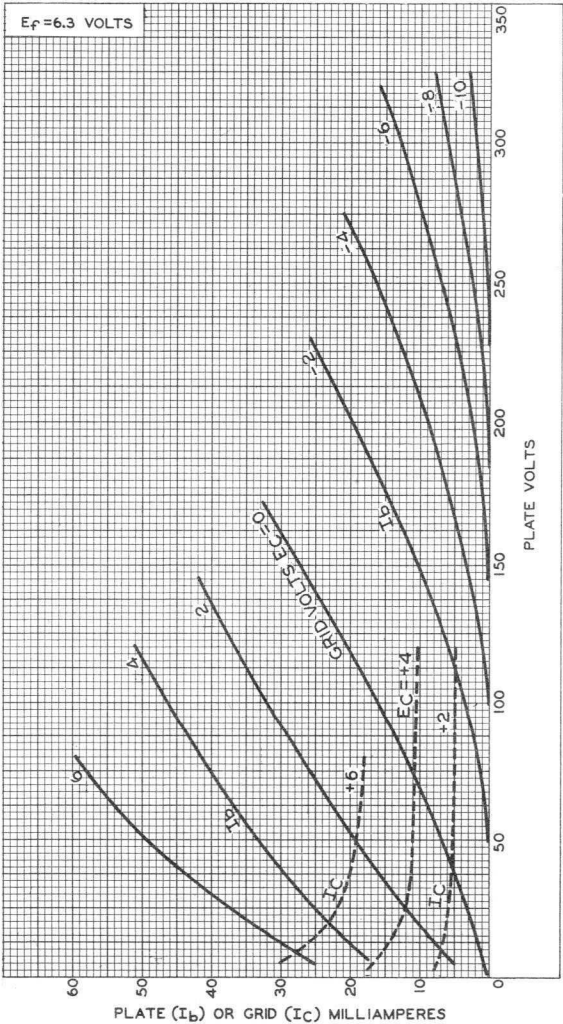


- ▲ With external shield JEDEC No.315 connected to cathode of unit under test except as noted.
- With external shield JEDEC No.315 connected to ground.
- ★ The dc component must not exceed 100 volts.



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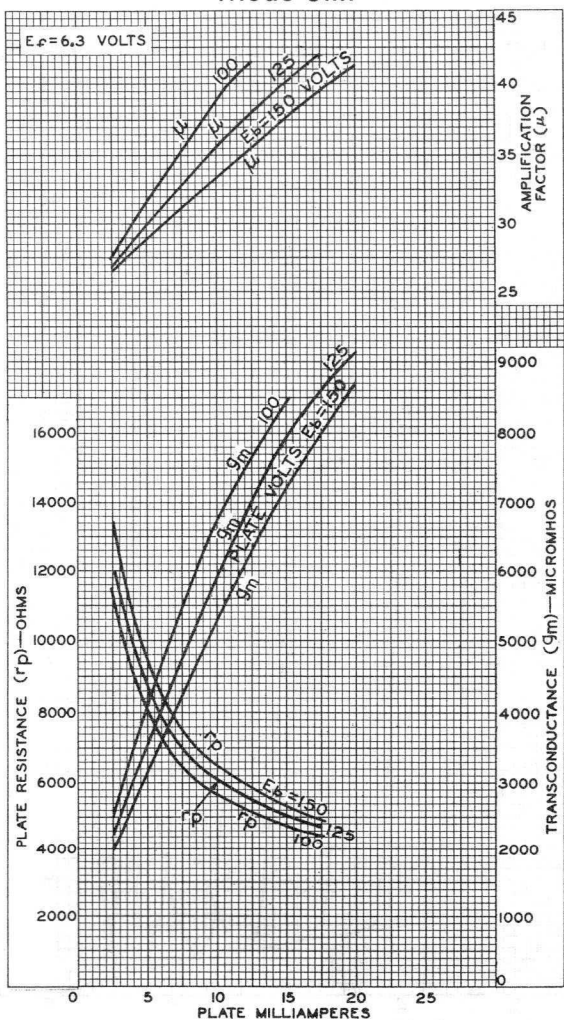
AVERAGE CHARACTERISTICS
Triode Unit



92CM-9190RI



AVERAGE CHARACTERISTICS Triode Unit

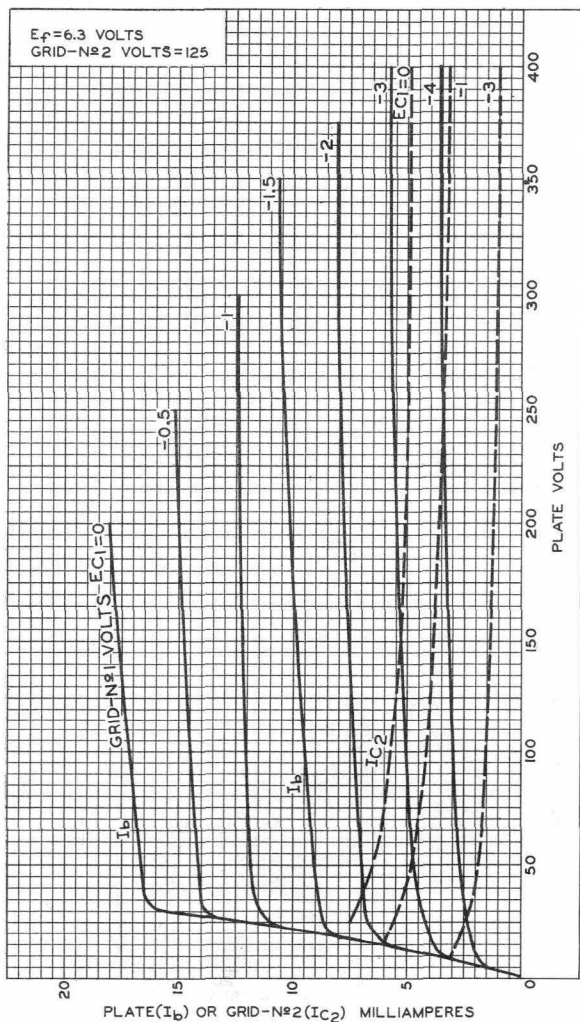


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AVERAGE CHARACTERISTICS Tetrode Unit

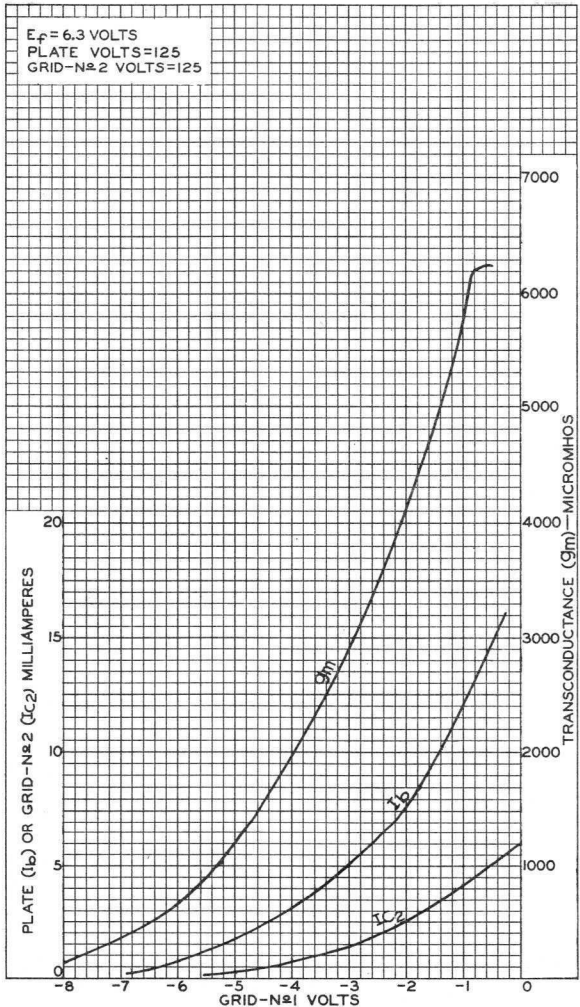


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AVERAGE CHARACTERISTICS

Tetrode Unit



92CM-9195



