

Semiremote-Cutoff Pentode

7-PIN MINIATURE TYPE

For Gain-Controlled, 40-Mc, Picture-IF Stages of TV Receivers

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) $6.3 \pm 10\%$ volts

Current at 6.3 volts 0.4 amp

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield [▲]	
Grid No.1 to plate	0.036 max.	0.026 max.	μf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater . . .	10	10	μf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	2.4	3.4	μf

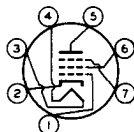
Characteristics, Class A₁ Amplifier:

Plate Supply Voltage	125	volts
Grid No.3 and Internal Shield	<i>Connected to cathode at socket</i>	
Grid-No.2 Supply Voltage	125	volts
Cathode Resistor	56	ohms
Plate Resistance (Approx.)	0.2	megohm
Transconductance	13000	μmhos
Plate Current	14	ma
Grid-No.2 Current	3.4	ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 60	-15	volts

Mechanical:

Operating Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" $\pm$ 3-32"
Diameter	0.650" to 0.750"
Dimensional Outline	See General Section
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW	7CM

Pin 1—Grid No.1
Pin 2—Cathode
Pin 3—Heater
Pin 4—Heater
Pin 5—Plate



Pin 6—Grid No.2
Pin 7—Grid No.3,
Internal
Shield



AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. 330 max. volts
 GRID No.3 (SUPPRESSOR GRID). . . *Connect to cathode at socket*
 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. volts
 GRID-No.2 INPUT:

For grid-No.2 voltages up
 to 165 volts 0.65 max. watt

For grid-No.2 voltages be-
 tween 165 and 330 volts. *See Grid-No.2 Input*

Rating Chart at front of Receiving Tube Section

PLATE DISSIPATION. 3.1 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. 200 max. volts

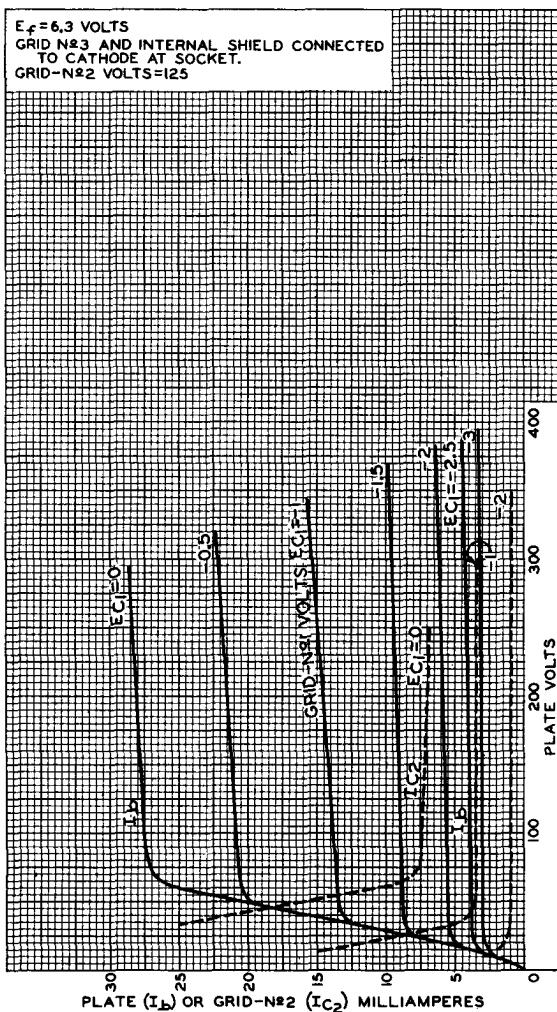
Heater positive with respect to cathode. 200[▲] max. volts

▲ With external shield JEDEC No.316 connected to cathode.

● The dc component must not exceed 100 volts.



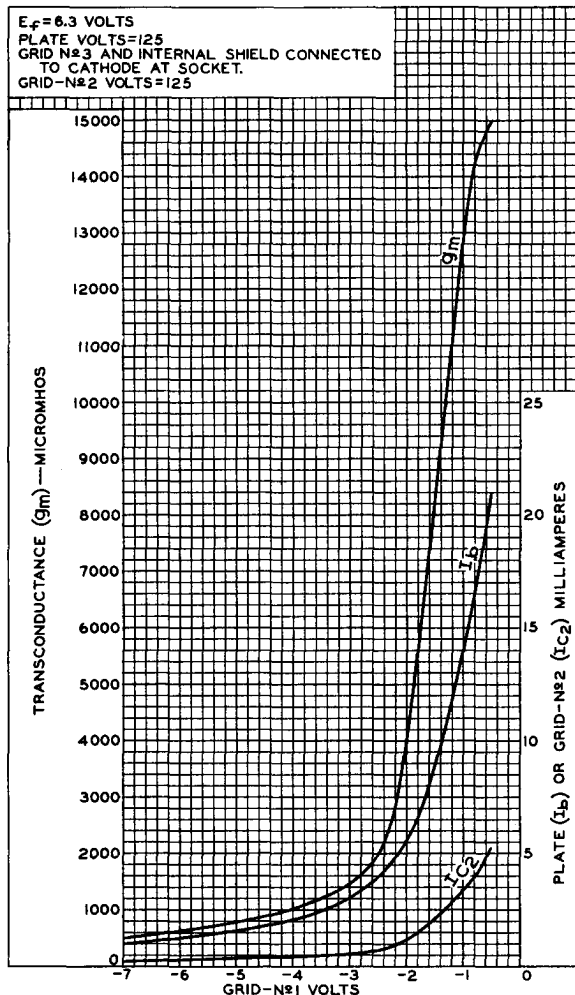
AVERAGE CHARACTERISTICS

 $E_f = 6.3$ VOLTSGRID N#3 AND INTERNAL SHIELD CONNECTED
TO CATHODE AT SOCKET.GRID-N#2 VOLTS= I_{C2} 

92CM-10390RI



AVERAGE CHARACTERISTICS



92CM-10391R1

