



6EW6

# SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

6EW6

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . .	6.3 ± 10%	volts
Current . . . . .	0.4	amp

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>o</sup></i>	
Grid No.1 to plate . . . . .	0.04 max.	0.03 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

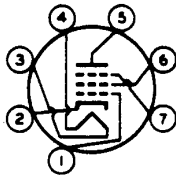
### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage. . . . .	125	volts
Grid No.3 . . . . .	<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. . . . .	14000	μmhos
Plate Current . . . . .	11	ma
Grid-No.2 Current . . . . .	3.2	ma
Grid-No.1 Voltage (Approx.) for plate μ = 20 . . . . .	-3.5	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" ± 3/32"
Diameter. . . . .	0.650" to 0.750"
Dimensional Outline . . . . .	<i>See General Section</i>
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

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### SHARP-CUTOFF PENTODE

#### AMPLIFIER — Class A<sub>1</sub>

**Maximum Ratings, Design-Maximum Values:**

PLATE VOLTAGE. . . . . 330 max. volts  
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE. . . . . 0 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. 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<sup>▲</sup>max. volts

<sup>○</sup> With external shield JEDEC No.316 connected to cathode.

<sup>▲</sup> The dc component must not exceed 100 volts.

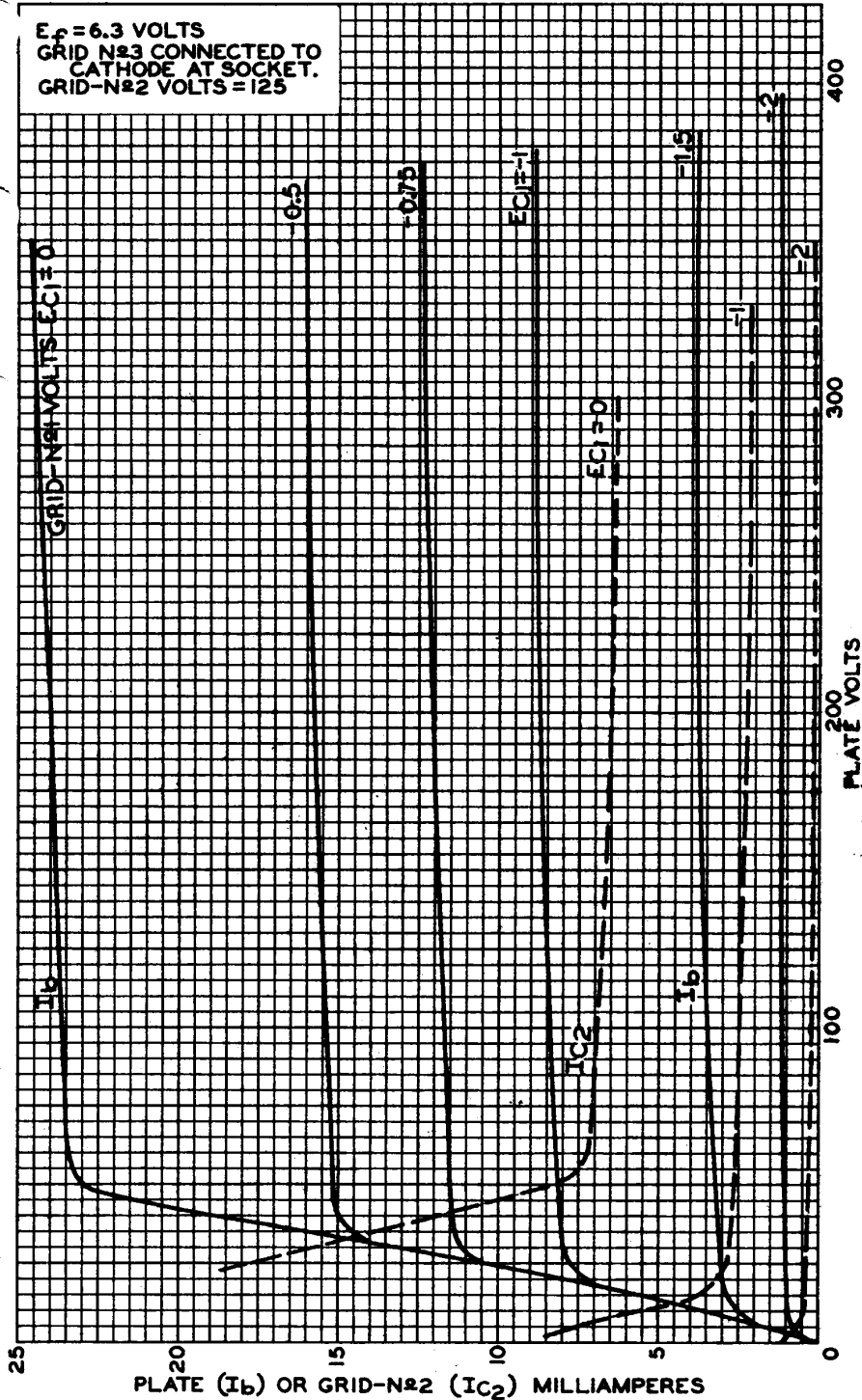


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### AVERAGE CHARACTERISTICS

$E_p = 6.3$  VOLTS  
GRID-N#3 CONNECTED TO  
CATHODE AT SOCKET.  
GRID-N#2 VOLTS = 125



ELECTRON TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-9965

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### AVERAGE CHARACTERISTICS

