



6DE6

SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

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GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3 ± 10%	volts
Current	0.3	amp

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield ^o	
Grid No.1 to plate	0.025 max.	0.015 max.	μμf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	6.5	6.5	μμf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	2	3	μμf

Characteristics, Class A₁ Amplifier:

Plate Supply Voltage	125	volts
Grid No.3	↓	
Grid-No.2 Supply Voltage	125	volts
Cathode Resistor	56	ohms
Plate Resistance (Approx.)	0.25	megohm
Transconductance	8000	μmhos
Plate Current	15.5	ma
Grid-No.2 Current	4.2	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-9	volts
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 700 and cathode resistor (ohms) = 0	-5.5	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	See General Section
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)	

← Indicates a change.

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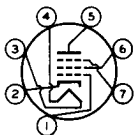


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Basing Designation for BOTTOM VIEW 7CM

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) 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 0.55 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. 2.3 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with
 respect to cathode 200 max. volts

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

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation 0.25 max. megohm

For cathode-bias operation 1 max. megohm

^o with external shield JEDEC No.316 connected to cathode.

[◆] Connected to cathode at socket.

[▲] The dc component must not exceed 100 volts.

→ Indicates a change.

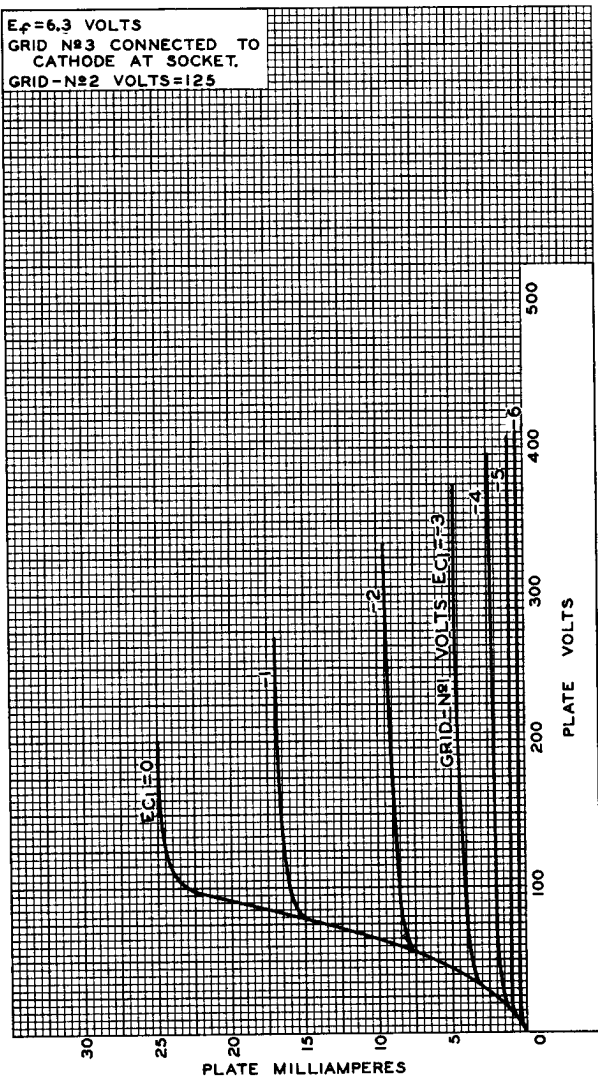


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AVERAGE PLATE CHARACTERISTICS

$E_f = 6.3$ VOLTS
GRID N^o3 CONNECTED TO
CATHODE AT SOCKET.
GRID-N^o2 VOLTS=125



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AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
 PLATE VOLTS = 125
 GRID N^o3 CONNECTED TO
 CATHODE AT SOCKET.
 GRID-N^o2 VOLTS = 125

