



6DE6

SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

6DE6

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage.	6.3 $\pm$ 10%	volts
Current.	0.3	amp

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield^o</i>	
Grid No.1 to plate	0.025 max.	0.015 max.	μ f
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	6.5	6.5	μ f
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	2	3	μ f

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	μ hos
Plate Current.	15.5	ma
Grid-No.2 Current.	4.2	ma
Grid-No.1 Voltage (Approx.) for plate μ a = 20.	-9	volts
Grid-No.1 Voltage (Approx.) for transconductance (μ hos) = 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" $\pm$ 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)

← Indicates a change.

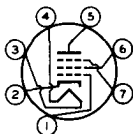


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Basing Designation for BOTTOM VIEW 7CM

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.

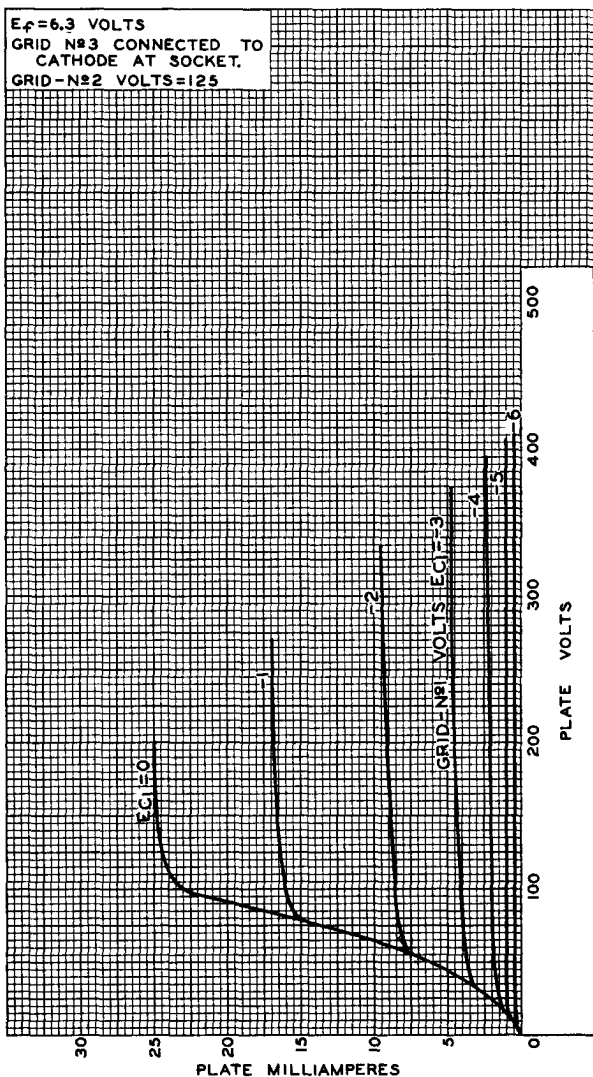


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AVERAGE PLATE CHARACTERISTICS

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



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AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
 PLATE VOLTS = 125
 GRID-Nº3 CONNECTED TO
 CATHODE AT SOCKET.
 GRID-Nº2 VOLTS = 125

