



7V7

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SHARP-CUTOFF PENTODE

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathode:

Voltage. 6.3[□] ac or dc voltsCurrent. 0.45^{□□} ampDirect Interelectrode Capacitances:[○]Grid No.1 to Plate . . . 0.004 max. μf Input. 9.5 μf Output 6.5 μf [○] With external shield connected to cathode.**Mechanical:**

Mounting Position. Any

Maximum Overall Length 2-25/32"

Maximum Seated Length. 2-1/4"

Maximum Diameter 1-3/16"

Bulb T-9

Base Lock-in 8-Pin

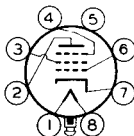
Basing Designation for BOTTOM VIEW 8V

Pin 1 - Heater

Pin 2 - Plate

Pin 3 - Grid No.2

Pin 4 - Grid No.3

Pin 5 - Internal
Shield

Pin 6 - Grid No.1

Pin 7 - Cathode

Pin 8 - Heater

Plug - Base
ShellAMPLIFIER - Class A₁**Maximum Ratings, Design-Center Values:**

PLATE VOLTAGE. 300 max. volts

GRID-No.2 (SCREEN) VOLTAGE 150 max. volts

GRID-No.2 SUPPLY VOLTAGE 300 max. volts

PLATE DISSIPATION. 4 max. watts

GRID-No.2 DISSIPATION. 0.8 max. watt

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode . . . 90 max. volts

Heater positive with respect to cathode . . . 90 max. volts

Typical Operation and Characteristics:Condition I*Condition II**

Plate Voltage. 300 300 . . . volts

Grid No.3 (Suppressor) Connected to cathode at socket

Internal Shield. Connected to cathode at socket

Grid-No.2 Supply -

Voltage# 150 300 . . . volts

Grid-No.2 Resistor - 40000 . . . ohms

Min. Cathode-Bias

Resistor. 160 160 . . . ohms

[□] Nominal voltage = 7.0 volts.^{□□} Nominal current = 0.48 ampere.

*, **, #: See next page.

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Plate Current.	10	10	ma
Grid-No.2 Current. . .	3.9	3.9	ma
Plate Resistance . . .	0.3	0.3	megohm
Transconductance . . .	5800	5800	μ mhos
Grid-No.1 Bias (Approx.)			
for plate current of			
10 μ a.	-8	-16	volts

* Condition I with fixed grid-No.2 supply gives a sharp-cutoff characteristic.

** Condition II with series grid-No.2 resistor gives an extended-cutoff characteristic.

When grid-No.2 supply voltage in excess of 150 volts is used, a series grid-No.2 resistor must be used to limit grid-No.2 voltage to 150 volts when the plate current is at its normal value of 10 ma.