



7V7

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. $\mu\mu\text{f}$ Input. 9.5 $\mu\mu\text{f}$ Output 6.5 $\mu\mu\text{f}$ [○] 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

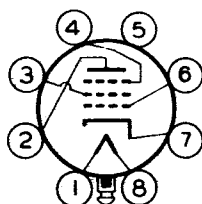
Basing Designation for BOTTOM VIEW 8V

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:

	<u>Condition I*</u>	<u>Condition II**</u>	
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.

JUNE 15, 1948

TUBE DEPARTMENT

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA

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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 hos
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.

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GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage.	6.3 [□]	ac or dc volts
Current.	0.45 ^{□□}	amp

Direct Interelectrode Capacitances:[○]

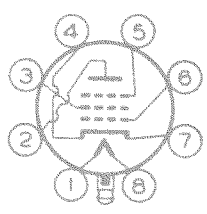
Grid No.1 to Plate . .	0.0025 max.	μ lf
Input.	9.5	μ lf
Output	7	μ lf

[○] 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	8BJ

- Pin 1-Heater
- Pin 2-Plate
- Pin 3-Grid No.2
- Pin 4-Cathode
- Pin 5-Grid No.3,
Internal
Shield



- Pin 6-Grid No.1
- Pin 7-Cathode
- Pin 8-Heater
- Plug - Base
Shell

Maximum Ratings, Typical Operation, and Characteristics are the same as for Type 7V7

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

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