



7E7

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TWIN DIODE—REMOTE-CUTOFF PENTODE

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathode:

Voltage. 6.3[□] ac or dc voltsCurrent. 0.3^{□□} ampDirect Interelectrode Capacitances:[○]

Pentode Unit:

Grid No.1 to Plate 0.005 max. μf Input. 4.6 μf Output 5.5 μf Diode-No.1 Plate to Grid No.1 0.013 max. μf Diode-No.2 Plate to Grid No.1 0.003 max. 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 8AE

Pin 1—Heater

Pin 2—Pentode

Plate

Pin 3—Diode-No.2

Plate

Pin 4—Diode-No.1

Plate

Pin 5—Pentode

Grid No.2

Pin 6—Pentode

Grid No.1

Pin 7—Cathode,

Pentode

Grid No.3

Pin 8—Heater

Plug—Base

Shell

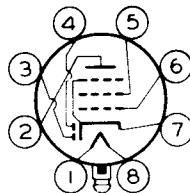
PENTODE UNIT
AMPLIFIER—Class A₁**Maximum Ratings, Design—Center Values:**

PLATE VOLTAGE. 300 max. volts

GRID-No.2 (SCREEN) VOLTAGE 100 max. volts

GRID-No.2 SUPPLY VOLTAGE 300 max. volts

PLATE DISSIPATION. 2 max. watts

GRID-No.2 DISSIPATION. 0.3 max. watt

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Positive bias value 0 max. volts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. 90 max. volts

Heater positive with respect to cathode. 90 max. volts

(continued on next page)

[□] Nominal voltage = 7.0 volts.^{□□} Nominal current = 0.32 ampere.

←Indicates a change.

SEPT. 30, 1948

TUBE DEPARTMENT

DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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Typical Operation and Characteristics:

Plate Voltage.	100	250	. .	volts
Grid-No.2 Voltage.	100	100	. .	volts
Cathode-Bias Resistor.	80	330	. .	ohms
Plate Resistance (Approx.)	0.15	0.7	. .	megohm
Transconductance	1600	1300	. .	μ mhos
Grid-No.1 Bias (Approx.) for transconductance of 2 μ mhos	-36	-42.5	. .	volts
Plate Current.	10	7.5	. .	ma
Grid-No.2 Current.	2.7	1.6	. .	ma

DIODE UNITS - Two

Maximum Ratings, Design-Center Values:

PLATE CURRENT (For Each Diode)	1 max.	ma
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