



7R7

TWIN DIODE—REMOTE-CUTOFF PENTODE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage. 6.3[□] ac or dc volts

Current. 0.3^{□□} amp

Direct Interelectrode Capacitances:*

Grid No.1 to Plate 0.004 max. μf

Input to Cathode 5.6 μf

Output to Cathode. 5.3 μf

Plate of Diode No.1 to
Pentode Grid No.1 0.005 max. μf

Plate of Diode No.2 to
Pentode Grid No.1 0.002 max. μf

* With external shield connected to cathode.

Mechanical:

Mounting Position. Any

Maximum Overall Length 2-25/32"

Maximum Seated Length. 2-1/4"

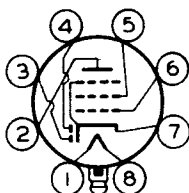
Maximum Diameter 1-3/16"

Bulb T-9

Base Lock-in 8-Pin

Basing Designation for BOTTOM VIEW 8AE

- | | |
|------------------|----------------|
| Pin 1—Heater | Pin 6—Pentode |
| Pin 2—Pentode | Grid No.1 |
| Plate | Pin 7—Cathode, |
| Pin 3—Diode No.2 | Pentode |
| Plate | Grid No.3 |
| Pin 4—Diode No.1 | Pin 8—Heater |
| Plate | |
| Pin 5—Pentode | Plug —Base |
| Grid No.2 | Shell |



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. 2.0 max. watts

GRID-No.2 DISSIPATION. 0.25 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

Typical Operation and Characteristics:

Plate Voltage.	100	100	250	250	volts
Grid-No.2 Voltage.	100	100	100	100	volts

□, □□: See next page.

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Grid-No.1 Voltage.	-2.0	-1.0	-2.0	-1.0	volts
Cathode-Bias Resistor.	450	130	450	130	ohms
Plate Resistance (Approx.) . . .	0.5	0.35	1.8	1	megohm
Transconductance	2100	3000	2200	3400	μ hos
Grid-No.1 Bias (Approx.) for					
transconductance of 2 μ hos	-16	-16	-20	-20	volts
Plate Current.	3.4	5.5	3.5	6.2	ma
Grid-No.2 Current.	1.0	2.2	1.0	1.6	ma

□ Nominal voltage = 7.0 volts.

□□ Nominal current = 0.32 ampere.

OCTOBER 15, 1947

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA