



9BR7

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TWIN DIODE-HIGH-MU TRIODE

9-PIN MINIATURE TYPE

*Intended for use in equipment having
series heater-string arrangement*

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

	Series	Parallel	
Heater arrangement			
Voltage (AC or DC)	9.4	4.7	volts
Current	0.3	0.6 $\pm$ 6%	amp
Warm-up time (Average)	—	11	sec

Direct Interelectrode Capacitances

(Approx.):

	Without External Shield	With External Shield ^o
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Triode Unit:

Grid to plate	1.9	1.9	μf
Grid to cathode, cathode of diodes No.1 and No.2 & internal shield, and heater . .	2.6	2.8	μf
Plate to cathode, cathode of diodes No.1 and No.2 & internal shield, and heater . .	0.3	1	μf

Diode Units:

Diode-No.1 plate to cathode of diodes No.1 and No.2 & internal shield, and heater . .	1.8	2	μf
Diode-No.2 plate to cathode of diodes No.1 and No.2 & internal shield, and heater . .	1.8	2	μf

Characteristics, Class A₁ Amplifier (Triode Unit):

Plate Supply Voltage.	250	volts
Cathode Resistor.	200	ohms
Amplification Factor.	60	
Plate Resistance (Approx.)	10900	ohms
Transconductance.	4000	μmhos
Plate Current	10	ma
Grid Voltage (Approx.) for plate $\mu\text{a} = 10$	-12	volts

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-3/16"
Maximum Seated Length.	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" $\pm$ 3/32"
Maximum Diameter.	0.750" to 0.875"
Dimensional Outline	See General Section
Bulb.	T6-1/2

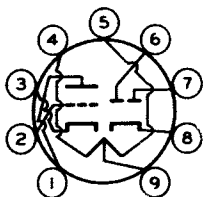


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TWIN DIODE—HIGH-MU TRIODE

Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9CF

Pin 1—Triode Plate
 Pin 2—Triode Grid
 Pin 3—Triode
 Cathode
 Pin 4—Heater
 Pin 5—Heater
 Pin 6—Diode-No.2
 Plate



Pin 7—Diode-No.1
 Plate
 Pin 8—Cathode of
 Diodes No.1
 & No.2,
 Internal
 Shield
 Pin 9—Heater
 Mid-Tap

TRIODE UNIT — Amplifier — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. 300 max. volts
 GRID VOLTAGE:
 Negative-bias value. 50 max. volts
 PLATE DISSIPATION. 2.5 max. watts
 PEAK HEATER-CATHODE VOLTAGE:
 Heater negative with respect to cathode. . 300 max. volts
 Heater positive with respect to cathode. . 200[▲] max. volts

DIODE UNITS — Two

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PEAK INVERSE PLATE VOLTAGE 300 max. volts
 PEAK PLATE CURRENT 60 max. ma
 PEAK HEATER-CATHODE VOLTAGE:
 Heater negative with respect to cathode. . 300 max. volts
 Heater positive with respect to cathode. . 200[▲] max. volts

Characteristics:

Plate Current for plate
 volts = 5 17 ma

○ With external shield JEDEC No.315 connected to cathode of unit under test.

▲ The dc component must not exceed 100 volts.