

Twin Diode—Medium-Mu Triode

9-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current at 6.3 volts.	0.6 ± 6%	amp
Warm-up time (Average).	11	sec

Direct Interelectrode Capacitances:^a

Triode Unit:

Grid to plate	2	μμf
Grid to cathode and heater.	3.6	μμf
Plate to cathode and heater	0.4	μμf

Diode Units:

Plate of diode unit No.1 to triode grid.	0.03 max.	μμf
Plate of diode unit No.2 to triode grid.	0.07 max.	μμf
Diode plate to cathode and heater (Each unit)	2.4	μμf

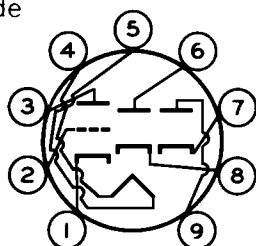
Characteristics, Class A₁ Amplifier (Triode Unit):

Plate Voltage	75	200	volts
Grid Voltage.	0	—	volts
Cathode Resistor.	—	330	ohms
Amplification Factor.	—	33	
Plate Resistance (Approx.).	—	5900	ohms
Transconductance.	—	5600	μmhos
Plate Current	14	11	ma
Grid Voltage (Approx.) for plate $\mu_a = 100$	—	-11	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" ± 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW.	9FJ

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



- Pin 7—Cathode of
Diode Unit
No.1
Pin 8—Cathode of
Diode Unit
No.2
Pin 9—Plate of
Diode Unit
No.1



6BV8

TRIODE UNIT — AMPLIFIER — Class A₁

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE	330	max.	volts
GRID VOLTAGE:			
Positive-bias value	0	max.	volts
PLATE DISSIPATION	2.7	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode .	200	max.	volts
Heater positive with respect to cathode .	200 ^b	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation.	0.1	max.	megohm
For cathode-bias operation.	0.5	max.	megohm

DIODE UNITS — Two

Values are for Each Unit

Maximum Ratings, *Design-Maximum Values:*

PLATE CURRENT	10	max.	ma
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode .	200	max.	volts
Heater positive with respect to cathode .	200 ^b	max.	volts

Characteristics, **Instantaneous Test Condition:**

Plate Current for plate volts = 5	23	ma
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^a without external shield.
^b The dc component must not exceed 100 volts.