

Twin Diode—Medium-Mu-Twin Triode

DUODECAR TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC)	6.3 ^a	6.3 ± 0.6	volts
Current	0.600 ± 0.040	0.600 ^b	amp
Warm-up time (Average)	11	—	sec

Peak heater-cathode

voltage (Each unit):

Heater negative with

respect to cathode. 200 max. volts

Heater positive with

respect to cathode. 200^c max. volts

Direct Interelectrode

Capacitances (Approx.):^d

Diode Units:

Plate of unit No.1 to cathode,
internal shield, and heater .

1.9 pf

Plate of unit No.2 to cathode,
internal shield, and heater .

1.8 pf

Triode Units:

Unit No. 1 Unit No. 2

Grid to plate

1.5 1.5 pf

Grid to cathode,
internal shield,
and heater.

1.7 1.8 pf

Plate to cathode,
internal shield,
and heater.

1.6 0.6 pf

Plate of diode unit No.1
to plate of diode
unit No.2

0.7 pf

Triode grid to plate of
diode unit No.1

0.015 0.005 pf

Triode grid to plate of
diode unit No.2

0.02 0.005 pf

Plate of triode unit No.1
to plate of triode
unit No.2

0.9 pf

Characteristics, Class A₁ Amplifier (Each Triode Unit):

Plate Voltage	250	volts
Grid Voltage.	-8	volts
Amplification Factor.	18	
Plate Resistance (Approx.)	7200	ohms
Transconductance.	2500	μmhos
Plate Current	10	ma
Grid Voltage (Approx.) for plate $\mu_a = 50$.	-20	volts

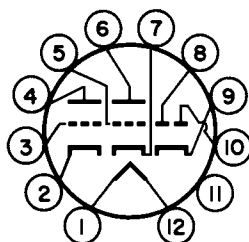


6B10

Mechanical:

Operating Position. Any
 Types of Cathodes Coated Unipotential
 Maximum Overall Length. 1.875"
 Seated Length 1.250" to 1.500"
 Diameter. 1.062" to 1.188"
 Bulb. T9
 Base. Small-Button Duodecal 12-Pin (JEDEC No.E12-70)
 Basing Designation for BOTTOM VIEW. 12BF

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



Pin 7-Cathode of
 Triode
 Unit No.1
 Pin 8-Plate of
 Diode
 Unit No.2
 Pin 9-Cathode of
 Diode Units
 No.1 & No.2
 Pin 10-Plate of
 Diode
 Unit No.1
 Pin 11-Internal
 Shield
 Pin 12-Heater

TRIODE UNITS — AMPLIFIER — Class A₁

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE	330 max.	volts
DC CATHODE CURRENT.	20 max.	ma
PLATE DISSIPATION	3 max.	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:
 For fixed-bias operation. 0.25 max. megohm
 For cathode-bias operation. 1 max. megohm

DIODE UNITS — Two

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

PLATE CURRENT	5 max.	ma
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Characteristics, Instantaneous Value:

Plate Current for plate volts = 5 . . .	20	ma
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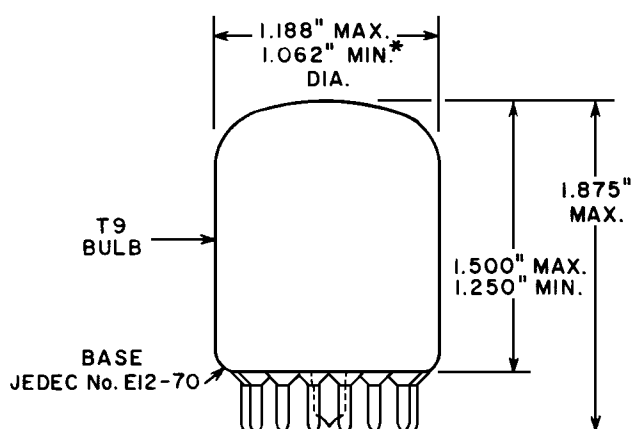
^a At heater amperes = 0.600.

^b At heater volts = 6.3.

^c The dc component must not exceed 100 volts.

^d Without external shield.





92CS-11485R1

* APPLIES TO MINIMUM DIAMETER EXCEPT IN AREA OF SEAL.

