



12FM6

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TWIN DIODE-MEDIUM-MU TRIODE

7-PIN MINIATURE TYPE

For use in automobile radio receivers operating directly from 6-cell storage-battery systems

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage range (AC or DC) 10 to 15.9 volts

This voltage range is on an absolute basis. For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.

Current (Approx.)
at 12.6 volts 0.15 amp

Direct Interelectrode Capacitances (Approx.):^o

Triode grid to triode plate	1.7	μμf
Triode grid to cathode and heater	2.7	μμf
Triode plate to cathode and heater	1.7	μμf
Diode-No.1 plate to diode-No.2 plate	1.1	μμf

Characteristics, Class A₁ Amplifier (Triode Unit):

Heater Voltage	12.6	12.6	volts
Plate Voltage	12.6	12.6	volts
Grid Voltage	0	-	volts
Grid Resistor (Bypassed)	0	2.2	megohms
Amplification Factor	13.5	10	
Plate Resistance (Approx.)	5600	7700	ohms
Transconductance	2400	1300	μmhos
Plate Current	1.8	1	ma

Mechanical:

Operating Position Any

Maximum Overall Length 2-1/8"

Maximum Seated Length 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip) 1-1/2" ± 3/32"

Diameter 0.650" to 0.750"

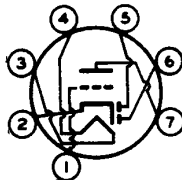
Dimensional Outline See General Section

Bulb T5-1/2

Base Small-Button Miniature 7-Pin (JEDEC No.E7-1)

Basing Designation for BOTTOM VIEW 7BT

Pin 1 - Triode Grid
Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Diode-No.2 Plate
Pin 6 - Diode-No.1 Plate
Pin 7 - Triode Plate

^o Without external shield.

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TRIODE UNIT — AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	30 max.	volts
CATHODE CURRENT.	20 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	30 max.	volts
Heater positive with respect to cathode.	30 max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance.	10 max.	megohms
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DIODE UNITS — Two

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PLATE CURRENT.	1 max.	ma
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Characteristics:

Heater Voltage	12.6	volts
Plate Current for plate volts = 10	2	ma