



12FK6

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TWIN DIODE—MEDIUM-MU TRIODE

7-PIN MINIATURE TYPE

For use in automobile radio receivers operating directly from 12-volt storage batteries

GENERAL DATA**Electrical:**Heater[•], for Unipotential Cathode:

Voltage range. 10 to 15.9 ac or dc 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.):⁰Triode grid to triode plate. 1.6 μ fTriode grid to cathode and heater. 1.8 μ fTriode plate to cathode and heater 0.7 μ fPlate of diode unit No.1 to plate of diode unit No.2. 0.9 μ f**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" $\pm$ 3/32"

Diameter 0.650" to 0.750"

Dimensional Outline. See General Section

Bulb T5-1/2

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

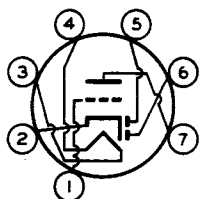
Basing Designation for BOTTOM VIEW 7BT

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

TRIODE UNIT — AMPLIFIER — Class A₁**Maximum Ratings, Design-Center Values:**

PLATE VOLTAGE. 16 max. volts

GRID VOLTAGE:

Positive-bias value. 0 max. volts

Negative-bias value. 16 max. volts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode 16 max. volts

Heater positive with respect to cathode 16 max. volts

[•],⁰: See next page.

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Characteristics:

Heater Voltage	12.6	volts
Plate Voltage	12.6	volts
Grid-Supply Voltage	0	volts
Grid Resistor (Bypassed)	2.2	megohms
Amplification Factor	7.4	
Plate Resistance (Approx.)	6200	ohms
Transconductance	1200	μ mhos
Plate Current	1.3	ma
Grid Voltage (Approx.) for plate $\mu a = 10$	-4	volts

Maximum Circuit Values:

Grid-Circuit Resistance	10 max.	megohms
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DIODE UNITS — Two**Maximum Ratings, Design-Center Values:**

PLATE CURRENT (Each unit).	1 max.	ma
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Characteristics:

Heater Voltage	12.6	volts
Plate Voltage (Each unit).	10	volts
Plate Current (Each unit).	2	ma

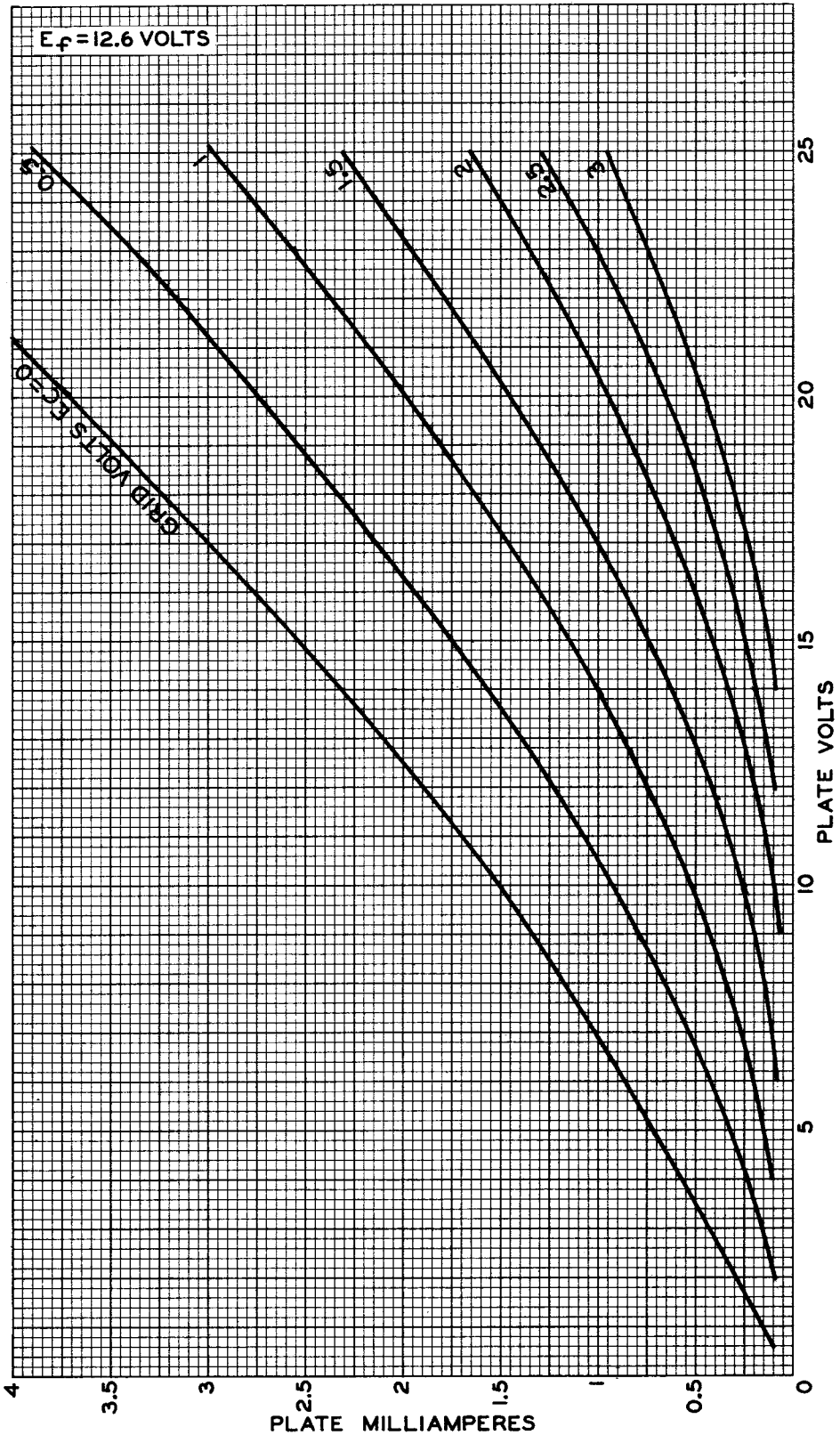
- Operation of heater in series with other heaters is not recommended.
- Without external shield.



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AVERAGE PLATE CHARACTERISTICS TRIODE UNIT

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ELECTRON TUBE DIVISION

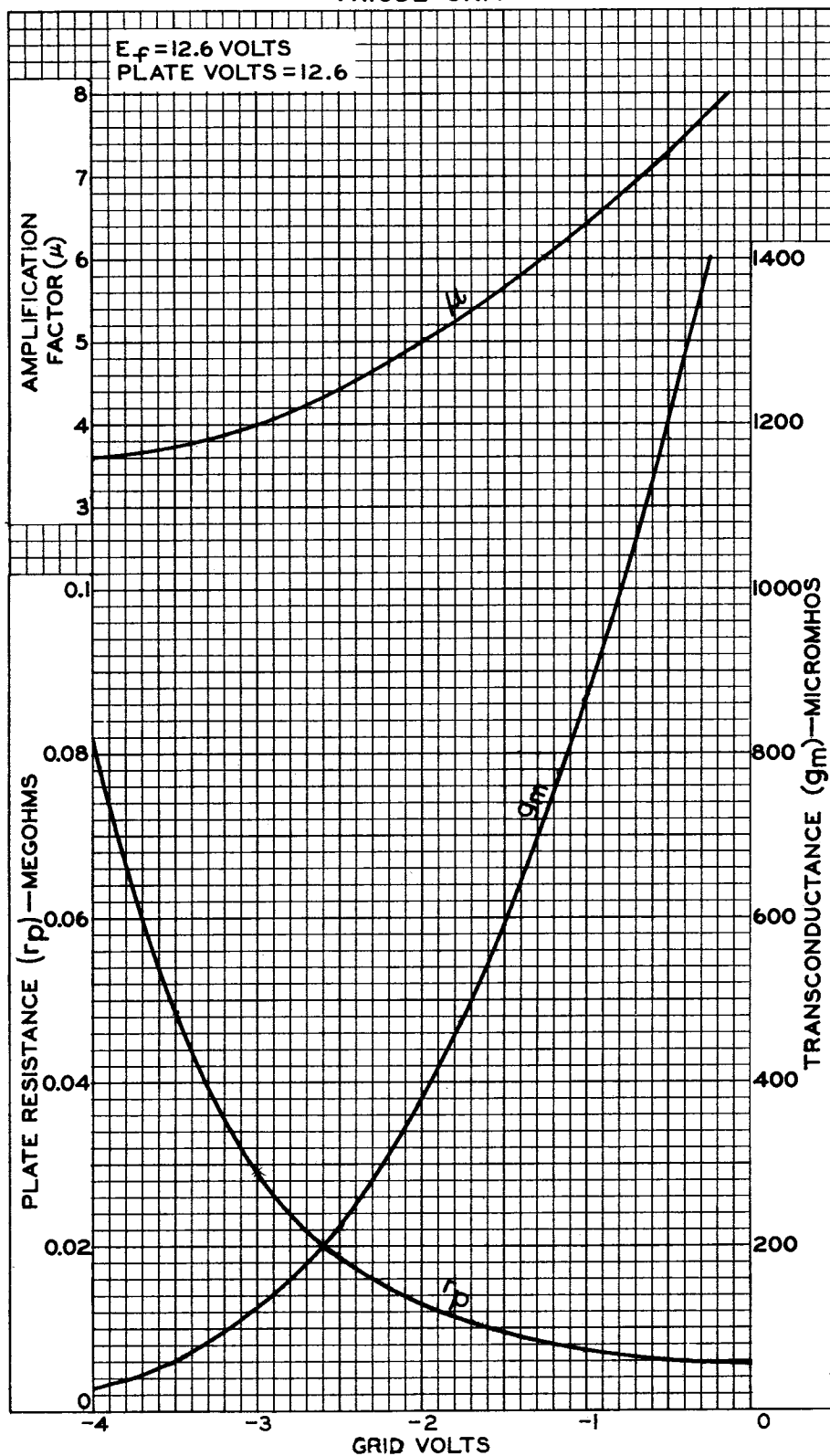
92CM-9799

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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TRIODE UNIT



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