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# TWIN DIODE—MEDIUM-MU TRIODE

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage. . . . .	6.3	. . . . .	ac or dc volts
Current. . . . .	0.3	. . . . .	amp

Direct Interelectrode Capacitances - Triode Unit:\*

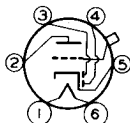
Grid to Plate. . . . .	1.5	. . . . .	$\mu\mu\text{f}$
Grid to Cathode. . . . .	1.5	. . . . .	$\mu\mu\text{f}$
Plate to Cathode. . . . .	4.3	. . . . .	$\mu\mu\text{f}$

\* With no external shield.

### Mechanical:

Mounting Position. . . . .	Any
Maximum Overall Length. . . . .	4-17/32"
Seated Length. . . . .	3-25/32" $\pm$ 1/8"
Maximum Diameter. . . . .	1-9/16"
Bulb. . . . .	ST-12
Cap. . . . .	Small
Base. . . . .	Small-Shell Small 6-Pin
Basing Designation for BOTTOM VIEW. . . . .	6G

- Pin 1-Heater
- Pin 2-Triode Plate
- Pin 3-Diode No.2 Plate



- Pin 4-Diode No.1 Plate
- Pin 5-Cathode
- Pin 6-Heater Cap - Triode Grid

### TRIODE UNIT AMPLIFIER - Class A<sub>1</sub>

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. . . . .	250 max.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode. . . . .	90 max.	volts
Heater positive with respect to cathode. . . . .	90 max.	volts

### Typical Operation and Characteristics:

Plate Voltage. . . . .	135	180	250	. . .	volts
Grid Voltage. . . . .	-10.5	-13.5	-20	. . .	volts
Amplification Factor. . . . .	8.3	8.3	8.3		
Plate Resistance. . . . .	11000	8500	7500	. . .	ohms
Transconductance. . . . .	750	975	1100	. . .	$\mu\text{mhos}$
Plate Current. . . . .	3.7	6.0	8.0	. . .	ma
Load Resistance. . . . .	25000	20000	20000	. . .	ohms
Power Output. . . . .	75	160	350	. . .	mw

← Indicates a change.

(continued on next page)



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### DIODE UNITS - Two

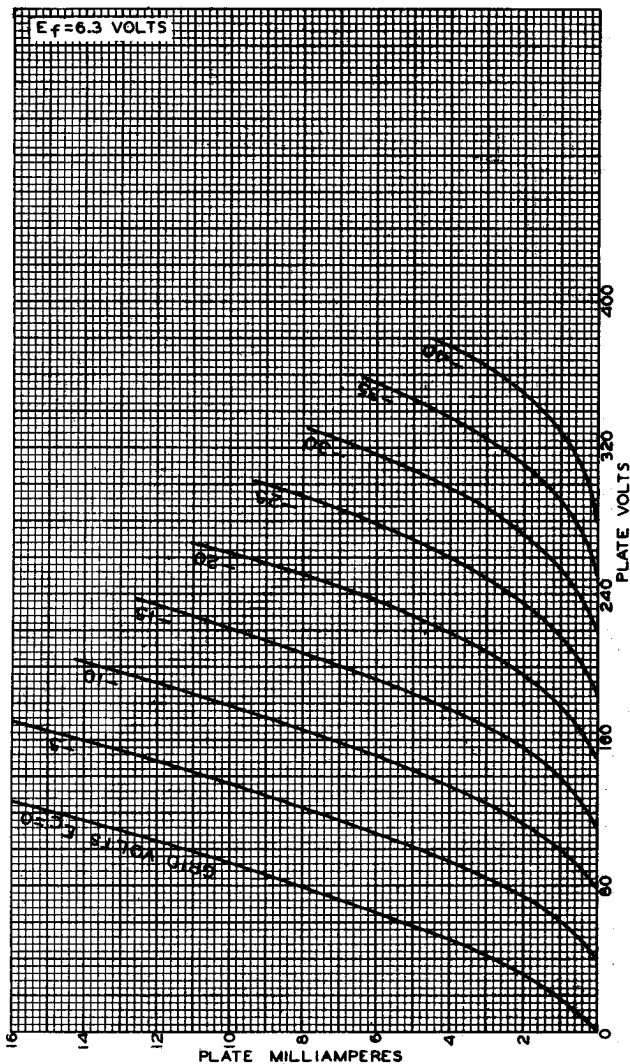
Consideration of these units, including typical circuits and diode curves, is given at the front of this Section. Diode biasing of the triode unit of the 85 may be used only when at least 20000 ohms resistance is in the triode plate circuit.

*For additional data, see RESISTANCE-COUPLED AMPLIFIER CHARTS at the front of this Section.*



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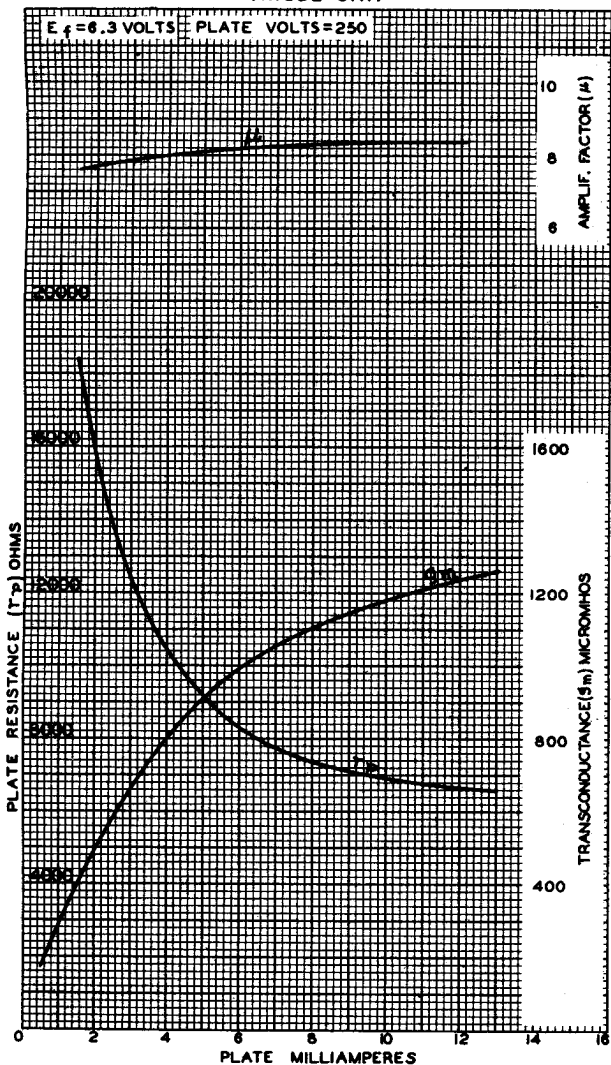
# AVERAGE PLATE CHARACTERISTICS TRIODE UNIT





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# AVERAGE CHARACTERISTICS TRIODE UNIT



MAY 14, 1948

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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