

117N7-GT



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## RECTIFIER-BEAM POWER AMPLIFIER

Heater Coated Unipotential Cathodes  
 Voltage 117 a-c or d-c volts  
 Current 0.09 amp.

Maximum Overall Length 3-7/16"

Maximum Seated Height 2-7/8"

Maximum Diameter 1-5/16"

Bulb T-9

Base Intermediate Shell Octal 8-Pin

Pin 1 - No Connection

Pin 2 - Heater

Pin 3 - Amplifier Plate

Pin 4 - Amplifier Grid

Pin 5 - Amplifier Screen



Pin 6 - Amplifier Cathode

Pin 7 - Rectifier Plate,  
Heater

Pin 8 - Rectifier Cathode

Mounting Position

BOTTOM VIEW (8AV)

Any

### RECTIFIER UNIT (Half-Wave)

Peak Inverse Voltage 350 max. volts

Peak Plate Current 450 max. ma.

D-C Heater-Cathode Potential 175 max. volts

*With Condenser-Input Filter:*

A-C Plate Voltage (RMS) 117 max. volts

Total Effective Plate-Supply

Impedance <sup>▲</sup> 15 min. ohms

D-C Output Current 75 max. ma.

### AMPLIFIER UNIT

Plate Voltage 117 max. volts

Screen Voltage 117 max. volts

Plate Dissipation 5.5 max. watts

Screen Dissipation 1 max. watt

*Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:*

Plate Voltage 100 volts

Screen Voltage 100 volts

Grid Voltage <sup>□</sup> -6 volts

Peak A-F Grid Voltage 6 volts

Zero-Signal Plate Current 51 ma.

Zero-Signal Screen Current 5 ma.

Plate Resistance 16000 approx. ohms

Transconductance 7000  $\mu$ hos

Load Resistance 3000 ohms

Total Harmonic Distortion 6 %

Max.-Signal Power Output 1.2 watts

<sup>▲</sup> When a filter-input condenser larger than 40  $\mu$ f is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak plate current to the rated value.

<sup>□</sup> Type of input coupling used should not introduce too much resistance in the grid circuit. With fixed bias, the resistance should not exceed 0.25 megohm; with cathode bias, 1.0 megohm.

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RCA RADIOTRON DIVISION  
 RCA MANUFACTURING COMPANY, INC.

DATA