



35B5

# BEAM POWER AMPLIFIER

MINIATURE TYPE

35B5

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage . . . . . 35 . . . . . ac or dc volts

Current . . . . . 0.15 . . . . . amp

Direct Interelectrode Capacitances (Approx.):<sup>o</sup>

Grid No.1 to Plate . . . . . 0.4 . . . . .  $\mu$ f

Input . . . . . 11 . . . . .  $\mu$ f

Output . . . . . 6.5 . . . . .  $\mu$ f

<sup>o</sup> With no external shield.

### Mechanical:

Mounting Position . . . . . Any

Maximum Overall Length . . . . . 2-5/8"

Maximum Seated Length . . . . . 2-3/8"

Length from Base Seat to Bulb Top (excluding tip) . . . . . 2"  $\pm$  3/32"

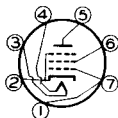
Maximum Diameter . . . . . 3/4"

Bulb . . . . . T-5-1/2

Base . . . . . Miniature Button 7-Pin

Basing Designation for BOTTOM VIEW . . . . . 7BZ

Pin 1 - Grid No.1  
Pin 2 - Cathode,  
          Grid No.3  
Pin 3 - Heater



Pin 4 - Heater  
Pin 5 - Plate  
Pin 6 - Grid No.2  
Pin 7 - Grid No.1

## AF POWER AMPLIFIER - Class A<sub>1</sub>

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . . 117 max. volts

GRID-No.2 (SCREEN) VOLTAGE . . . . . 117 max. volts

PLATE DISSIPATION . . . . . 4.5 max. watts

GRID-No.2 DISSIPATION . . . . . 1.0 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode . . . . . 150 max. volts

Heater positive with respect to cathode . . . . . 150 max. volts

### Typical Operation and Characteristics:

Plate Voltage . . . . . 110 . . . . . volts

Grid-No.2 Voltage . . . . . 110 . . . . . volts

Grid-No.1 (Control-Grid) Voltage . . . . . -7.5 . . . . . volts

Peak AF Grid-No.1 Voltage . . . . . 7.5 . . . . . volts

Zero-Signal Plate Current . . . . . 40 . . . . . ma.

Max.-Signal Plate Current . . . . . 41 . . . . . ma.

Zero-Signal Grid-No.2 Current . . . . . 3 . . . . . ma.

Max.-Signal Grid-No.2 Current . . . . . 7 . . . . . ma.

35B5



35B5

# BEAM POWER AMPLIFIER

Transconductance . . . . .	5800	. .	$\mu$ hos
Load Resistance. . . . .	2500	. .	ohms
Total Harmonic Distortion. . . . .	10	. .	%
Max.-Signal Power Output . . . . .	1.5	. .	watts

**Maximum Circuit Values** (for maximum rated conditions):

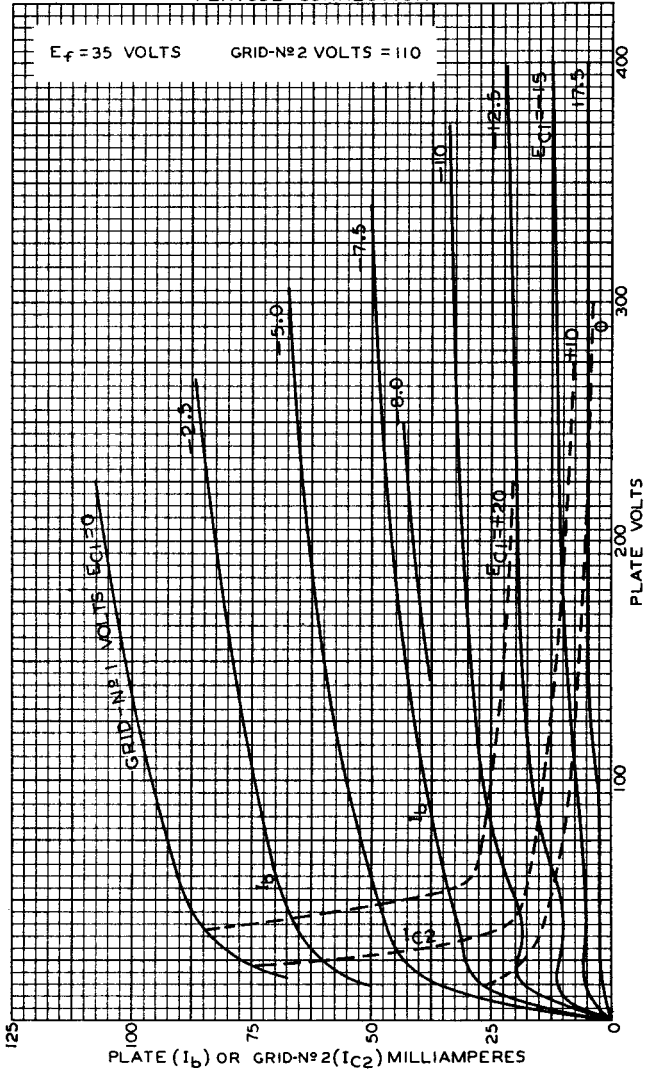
Grid-No.1-Circuit Res. {	fixed bias . .	0.1	. .	megohm
	cathode bias . .	0.5	. .	megohm



35B5

35B5

### AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



AUG. 15, 1941

TUBE DEPARTMENT

92CM - 6312R1

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

35B5



35B5

## OPERATION CHARACTERISTICS

$E_f = 35$  VOLTS  
 PLATE VOLTS = 110  
 GRID-№2 VOLTS = 110  
 GRID-№1 VOLTS = -7.5  
 SIGNAL VOLTS (RMS) = 5.3

