



50A5

# 50A5 BEAM POWER AMPLIFIER

## GENERAL DATA

### Electrical:

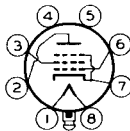
Heater, for Unipotential Cathode:

Voltage . . . . .	50	ac or dc volts
Current . . . . .	0.15	amp

### Mechanical:

Mounting Position . . . . .	Any
Maximum Overall Length . . . . .	3-5/32"
Maximum Seated Length . . . . .	2-5/8"
Maximum Diameter . . . . .	1-3/16"
Bulb . . . . .	T-9
Base . . . . .	Lock-in 8-Pin
Basing Designation for BOTTOM VIEW . . . . .	6AA

Pin 1 - Heater  
 Pin 2 - Plate  
 Pin 3 - Grid No.2  
 Pin 4 - No  
 Connection  
 Pin 5 - No Connection



Pin 6 - Grid No.1  
 Pin 7 - Cathode,  
 Grid No.3  
 Pin 8 - Heater  
 Plug - Base  
 Shell

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

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	200 max.	volts
GRID-No.2 (SCREEN) VOLTAGE . . . . .	117 max.	volts
PLATE DISSIPATION . . . . .	10 max.	watts
GRID-No.2 DISSIPATION . . . . .	1.25 max.	watts
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 . . . . .	110	200	volts
Grid-No.2 Voltage . . . . .	110	110	volts
Grid-No.1 Voltage . . . . .	-7.5	-8	volts
Peak A-F Grid No.1 Voltage . . . . .	7.5	8	volts
Zero-Signal Plate Current . . . . .	49	50	ma
Max.-Signal Plate Current . . . . .	50	55	ma
Zero-Signal Grid-No.2 Current . . . . .	4	1.5	ma
Max.-Signal Grid-No.2 Current . . . . .	8.5	6.0	ma
Plate Resistance (Approx.) . . . . .	13000	35000	ohms
Transconductance . . . . .	8000	8250	μmhos
Load Resistance . . . . .	2000	3000	ohms
Total Harmonic Distortion . . . . .	10	10	%
Max.-Sig. Power Output . . . . .	2.1	4.3	watts

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

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