

Beam Power Tube

7-PIN MINIATURE TYPE
CONTROLLED CATHODE WARM-UP TIME MINIMIZES
EXTRANEIOUS SOUND DURING RECEIVER WARM UP.

For Use in the Audio Output Stages of Television Receivers

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC). 6.3 $\pm$ 0.6 volts
 Current at heater volts = 6.3 0.450 amp

Peak heater-cathode voltage:

Heater negative with
 respect to cathode. 200 max. volts

Heater positive with
 respect to cathode. 200^a max. volts

Minimum Cathode Warm-up Time:^b

Heater volts = 6.3, plate
 and grid-No.2 volts = 250,
 and cathode resistor (ohms)
 = 680. 14 sec

Direct Interelectrode Capacitances
 (Approx.):

G1 to P 0.4 pf

Input: G1 to (K+G3,G2,H). 8.0 pf

Output: P to (K+G3,G2,H) 8.5 pf

Mechanical:

Operating Position Any

Type of Cathode. Coated Unipotential

Maximum Overall Length 2-5/8"

Maximum Seated Length. 2-3/8"

Length, Base Seat to Bulb Top (Excluding Tip). 2" $\pm$ 3/32"

Diameter 0.650" to 0.750"

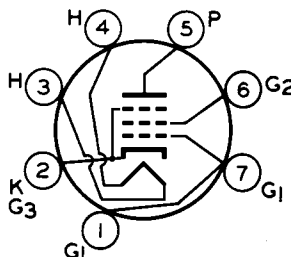
Dimensional Outline. See *General Section*

Bulb T5-1/2

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

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

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

Plate Voltage 275 max. volts

Grid-No.2 (Screen-Grid) Voltage 275 max. volts

Grid-No.2 Input 2 max. watts



6HG5

Plate Dissipation.	12 max.	watts
Bulb Temperature (At hottest point on bulb surface).	250 max.	°C

Typical Operation and Characteristics:

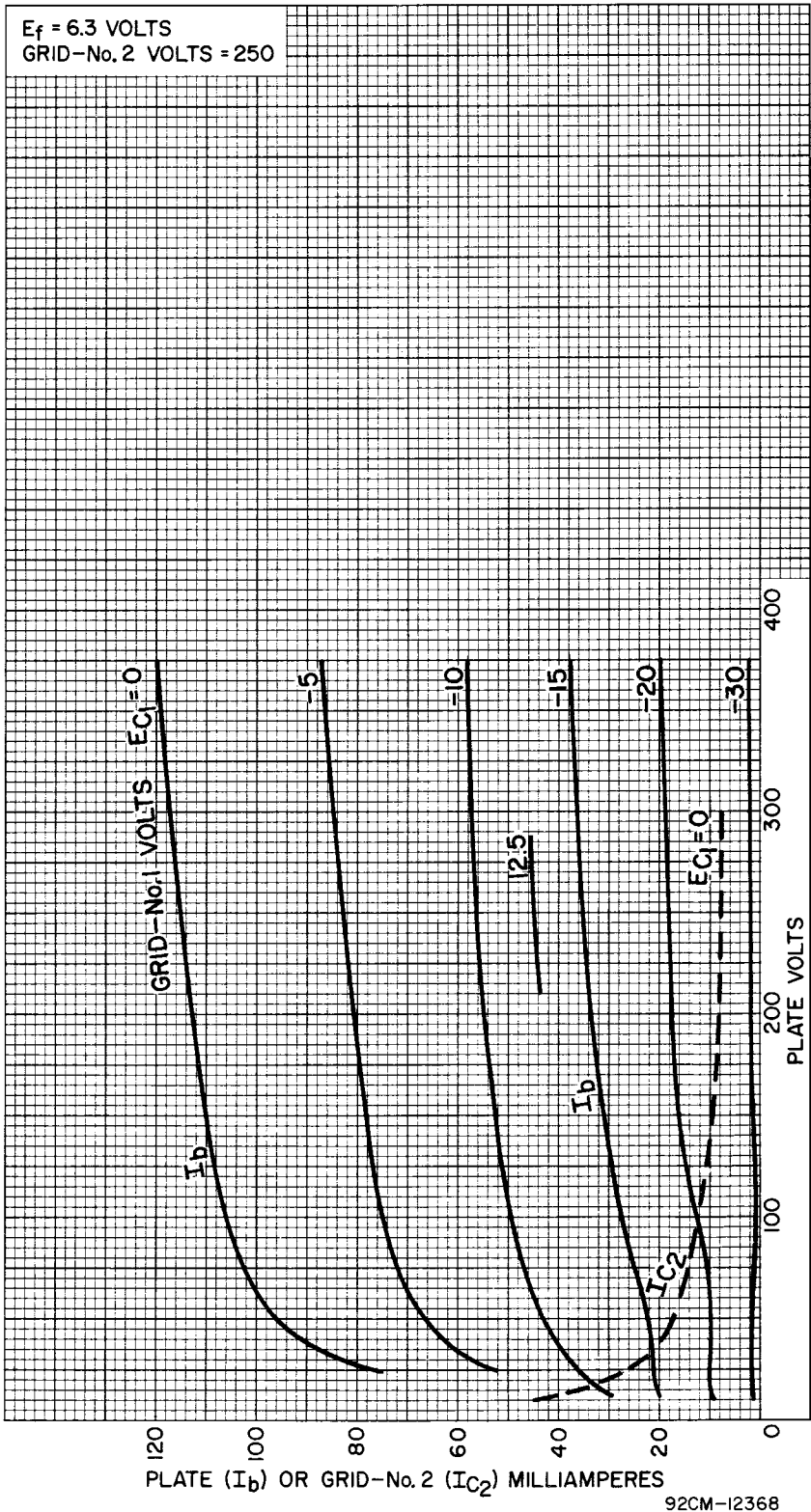
Plate Voltage.	180	250	volts
Grid-No.2 Voltage.	180	250	volts
Grid-No.1 (Control-Grid) Voltage	-8.5	-12.5	volts
Peak AF Grid-No.1 Voltage.	8.5	12.5	volts
Zero-Signal Plate Current.	29	45	ma
Max.-Signal Plate Current.	30	47	ma
Zero-Signal Grid-No.2 Current.	3	4.5	ma
Max.-Signal Grid-No.2 Current.	4	7	ma
Plate Resistance (Approx.)	58000	52000	ohms
Transconductance	3700	4100	μmhos
Load Resistance.	5500	5000	ohms
Total Harmonic Distortion.	8	8	%
Max.-Signal Power Output	2	4.5	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	0.5 max.	megohm

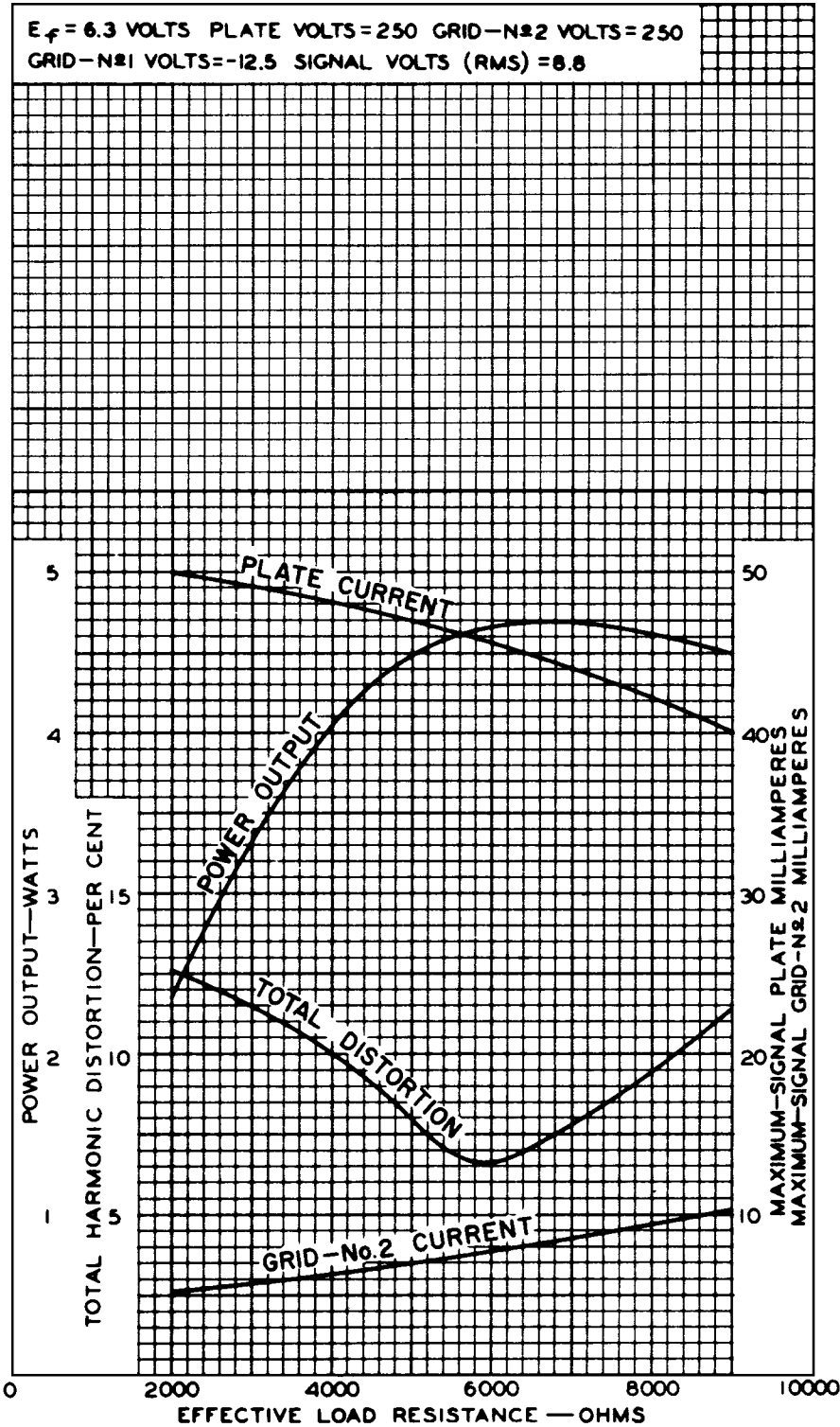
- a** The dc component must not exceed 100 volts.
- b** The time interval between the instant all electrode voltages are applied and the instant a current of one milliamperere flows in the plate circuit of the 6HG5.

AVERAGE CHARACTERISTICS



6HG5

OPERATION CHARACTERISTICS



92CM-6339R2

