

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 ± 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"

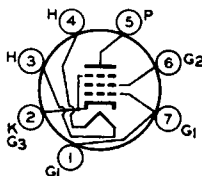
Dimensional Outline See General Section

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:

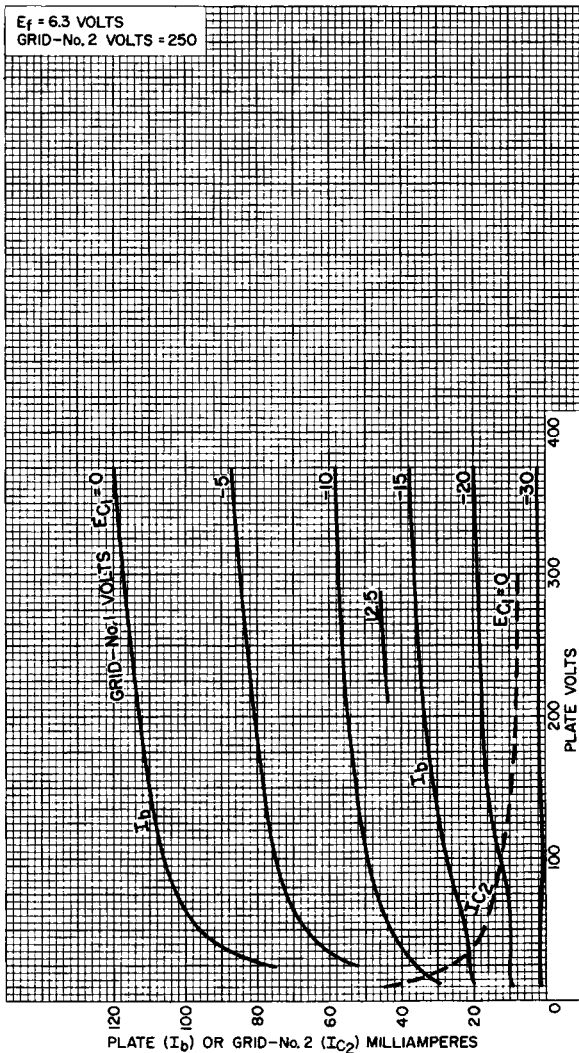
For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	0.5 max.	megohm

^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 milliamperes flows in the plate circuit of the 6HG5.



AVERAGE CHARACTERISTICS

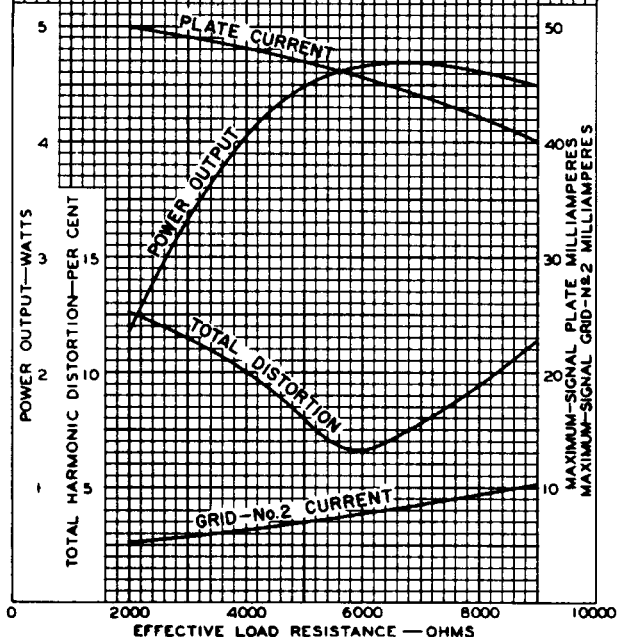


92CM-12368



OPERATION CHARACTERISTICS

$E_f = 6.3$ VOLTS PLATE VOLTS = 250 GRID-№2 VOLTS = 250
GRID-№1 VOLTS = -12.5 SIGNAL VOLTS (RMS) = 8.8



92CM-6339R2