RCA-6HG5

BEAM POWER TUBE

7-Pin Miniature Type

### Plate Dissipation: 12 Watts

### Controlled Cathode Warm-up Time

- Maximum Seated Length: 2-3/8" (2" ± 3/32"
- Length, Base Seat to Bulb Top (excluding tip): 2" ± 3/32"
- Diameter: 0.650" to 0.750"
- Bulb: T5 x 1/2
- Base: Small-Bulb Miniature 7-Pin (JEDEC No. E7-1)
- Basing Designation for BOTTOM VIEW: 7EZ

### GENERAL DATA

#### Electrical:

- **Heater Characteristics and Ratings:**
  - Voltage (AC or DC): 6.3 ± 0.6 volts
  - Current: 0.45 amp
  - Peak heater-cathode voltage: 200 max. volts
  - Heater negative with respect to cathode: 200 max. volts
  - Heater positive with respect to cathode: 14 sec
- **Minimum Cathode Warm-up Time:** 10 sec
- **Direct Inter-electrode Capacitances (Approx.):**
  - Grid No.1 to plate: 0.4 pf
  - Grid No.1 to cathode & grid No.3: 8 pf
  - Plate to cathode & grid No.3: 8.5 pf
- **Mechanical:**
  - Operating Position: Any
  - Maximum Overall Length: 2-5/8"

### AMPLIFIER - Class A1

#### Maximum Ratings, Design-Maximum Values:

- **Plate Voltage:** 275 max. volts
- **Grid-No.2 Voltage:** 275 max. volts
- **Grid-No.1 (Control-Grid) Voltage:** 12 volts
- **Zero-Signal Plate Current:** 29 mA
- **Max.-Signal Plate Current:** 30 mA
- **Zero-Signal Grid-No.2 Current:** 4.5 mA
- **Max.-Signal Grid-No.2 Current:** 7 mA

#### Typical Operation and Characteristics:

- **Plate Voltage:** 180 volts
- **Grid-No.2 Voltage:** 180 volts
- **Grid-No.1 (Control-Grid) Voltage:** 12 volts
- **Peak AF Grid-No.1 Voltage:** 8.5 volts
- **Zero-Signal Plate Current:** 29 mA
- **Max.-Signal Plate Current:** 30 mA
- **Zero-Signal Grid-No.2 Current:** 4 mA
- **Max.-Signal Grid-No.2 Current:** 7 mA

- **Plate Resistance (Approx.):** 50000 ohms
- **Transconductance:** 3700 µhos
- **Load Resistance:** 50000 ohms
- **Total Harmonic Distortion:** 8 %
- **Max.-Signal Power Output:** 2.5 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

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**DIMENSIONAL OUTLINE**

Dimensions in Inches

* Measured from base seat to bulb-top line as determined by ring gauge of 7/16 inside diameter.
** Applies in zone starting 0.375 from base seat.

**TERMINAL DIAGRAM**

Bottom View

78Z

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