

## Beam Power Tube

## 7-PIN MINIATURE TYPE

## GENERAL DATA

## Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . . 34 volts

Current . . . . .  $0.1 \pm 6\%$  amp

Direct Interelectrode Capacitances (Approx.):

Grid No.1 to plate. . . . . 0.6  $\mu\text{f}$ Grid No.1 to cathode & grid No.3,  
grid No.2, and heater . . . . . 12  $\mu\text{f}$ Plate to cathode & grid No.3,  
grid No.2, and heater . . . . . 6  $\mu\text{f}$ 

## Mechanical:

Operating Position. . . . . Any

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"

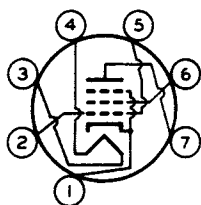
Dimensional Outline . . . . . See *General Section*

Bulb. . . . . T5-1/2

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

Basing Designation for BOTTOM VIEW. . . . . 7CV

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



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

AMPLIFIER — Class A<sub>1</sub>

## Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. . . . . 150 max. volts

GRID-No.2 (SCREEN-GRID) VOLTAGE. . . . . 130 max. volts

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Negative-bias value. . . . . 50 max. volts

Positive-bias value. . . . . 0 max. volts

GRID-No.2 INPUT. . . . . 1.1 max. watts

PLATE DISSIPATION. . . . . 5 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. 200 max. volts

Heater positive with respect to cathode. 200<sup>•</sup> max. volts

BULB TEMPERATURE (At hottest point

on bulb surface) . . . . . 180 max. °C

## Typical Operation and Characteristics:

Plate Voltage. . . . . 110 volts

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

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



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|                                        |       |            |
|----------------------------------------|-------|------------|
| Peak AF Grid-No.1 Voltage. . . . .     | 7.5   | volts      |
| Zero-Signal Plate Current. . . . .     | 35    | ma         |
| Zero-Signal Grid-No.2 Current. . . . . | 3     | ma         |
| Plate Resistance (Approx.) . . . . .   | 13000 | ohms       |
| Transconductance . . . . .             | 5700  | $\mu$ mhos |
| Load Resistance. . . . .               | 2500  | ohms       |
| Total Harmonic Distortion. . . . .     | .10   | %          |
| Max.-Signal Power Output . . . . .     | 1.4   | watts      |

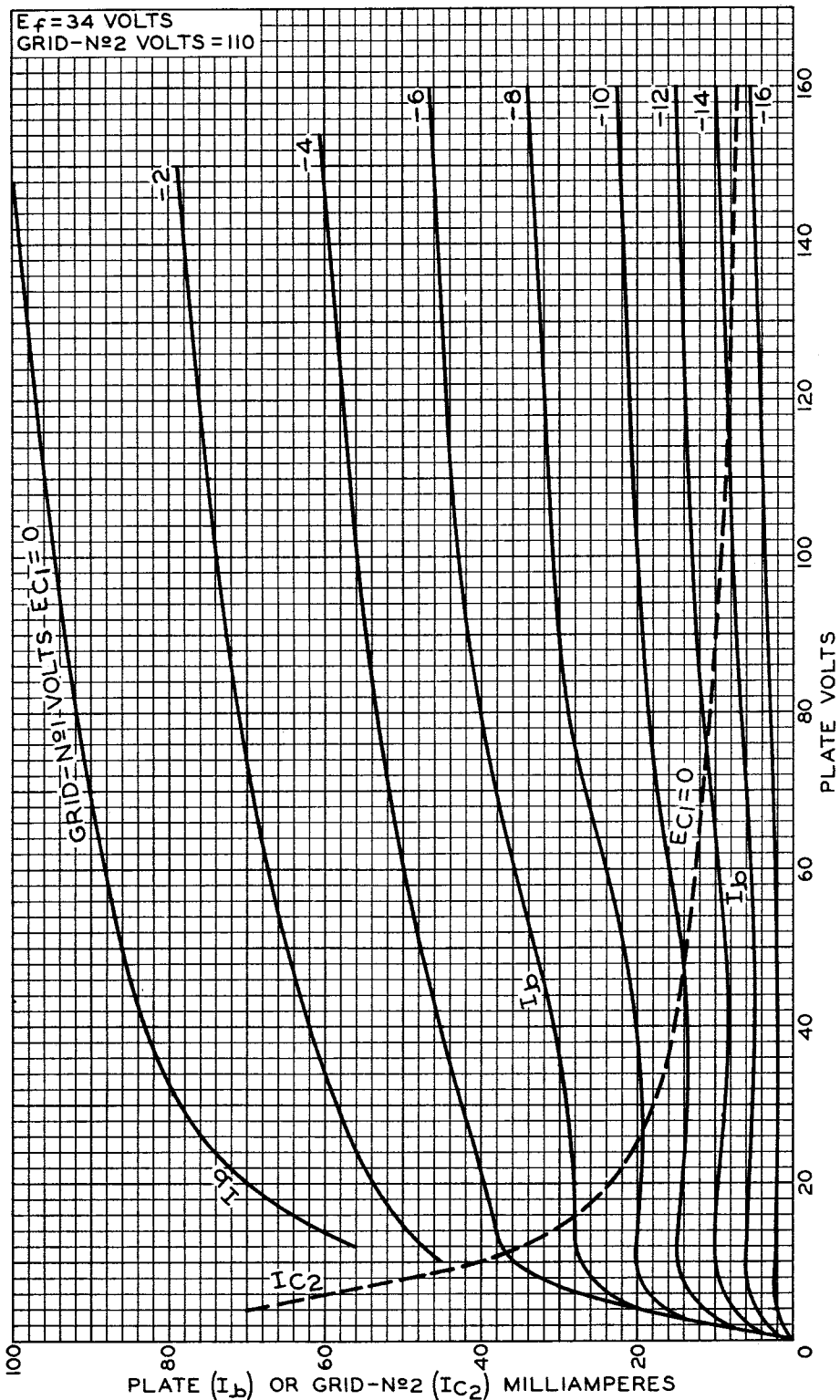
**Maximum Circuit Values:**

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

- ▲ Without external shield.
- The dc component must not exceed 100 volts.



AVERAGE CHARACTERISTICS

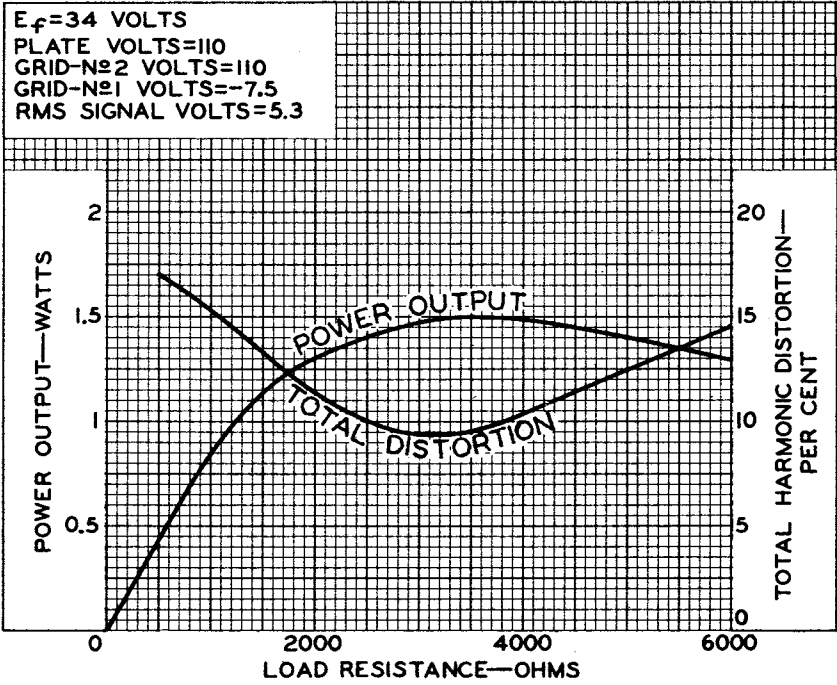


92CM-10779



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## OPERATION CHARACTERISTICS



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