

## Beam Power Tube

## 7-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

## GENERAL DATA

## Electrical:

Heater, for Unipotential Cathode:

|                                  |               |       |
|----------------------------------|---------------|-------|
| Voltage (AC or DC) . . . . .     | 34            | volts |
| Current . . . . .                | $0.1 \pm 6\%$ | amp   |
| Warm-up time (Average) . . . . . | 20            | sec   |

Direct Interelectrode Capacitances

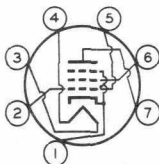
(Approx.):<sup>a</sup>

|                                                                      |     |               |
|----------------------------------------------------------------------|-----|---------------|
| Grid No.1 to plate . . . . .                                         | 0.6 | $\mu\text{f}$ |
| Grid No.1 to cathode & grid No.3,<br>grid No.2, and heater . . . . . | 12  | $\mu\text{f}$ |
| Plate to cathode & grid No.3,<br>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>b</sup> | max. | volts |
| BULB TEMPERATURE (At hottest point<br>on bulb surface). . . . . |                  |      |       |
|                                                                 | 250              | max. | °C    |



# 34GD5A

### Typical Operation and Characteristics:

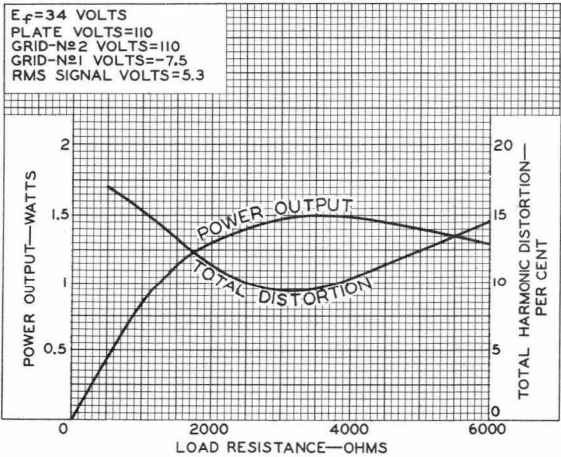
|                                         |       |           |
|-----------------------------------------|-------|-----------|
| Plate Voltage . . . . .                 | 110   | volts     |
| Grid-No.2 Voltage . . . . .             | 110   | volts     |
| Grid-No.1 Voltage . . . . .             | -7.5  | volts     |
| 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  | $\mu$ hos |
| 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 |

- <sup>a</sup> Without external shield.
- <sup>b</sup> The dc component must not exceed 100 volts.

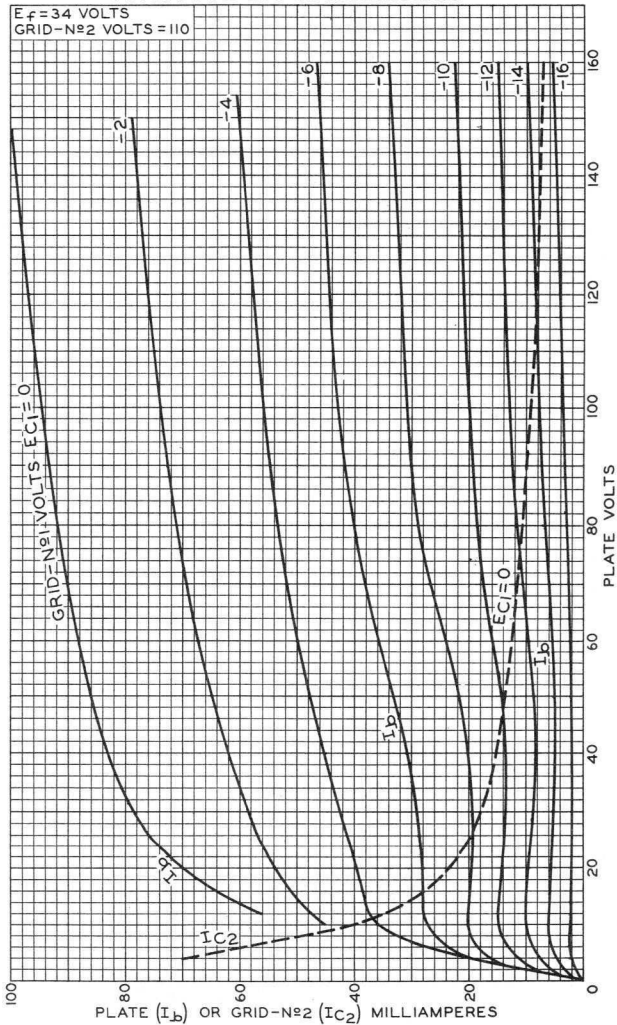
## OPERATION CHARACTERISTICS



92CS-10780



## AVERAGE CHARACTERISTICS



92CM-10779



RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA 2  
7-61

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