

## Beam Power Tube

## Electrical:

## Heater Characteristics and Ratings:

|                                |               |       |
|--------------------------------|---------------|-------|
| Voltage (AC or DC) . . . . .   | 6.3 $\pm$ 0.6 | volts |
| Current at 6.3 volts . . . . . | 0.760         | amp   |

## Maximum Heater-Cathode Voltage:

Heater negative with respect to cathode:

|                        |     |       |
|------------------------|-----|-------|
| Peak . . . . .         | 330 | volts |
| DC Component . . . . . | 220 | volts |

Heater positive with respect to cathode:

|                        |     |       |
|------------------------|-----|-------|
| Peak . . . . .         | 330 | volts |
| DC Component . . . . . | 220 | volts |

## Direct Interelectrode Capacitances:

|                                        |           |    |
|----------------------------------------|-----------|----|
| Input: G1 to (K + G3, G2, H) . . . . . | 13.0      | pf |
| Output: P to (K + G3, G2, H) . . . . . | 6.8       | pf |
| Plate to grid No.1 . . . . .           | 0.6 max.  | pf |
| Grid No.1 to heater. . . . .           | 0.25 max. | pf |

## Mechanical:

|                                                         |                                          |
|---------------------------------------------------------|------------------------------------------|
| Operating Position . . . . .                            | Any                                      |
| Type of Cathode. . . . .                                | Coated Unipotential                      |
| Maximum Overall Length . . . . .                        | 3-1/16"                                  |
| Maximum Seated Length. . . . .                          | 2-13/16"                                 |
| Length, Base Seat to Bulb Top (Excluding tip) . . . . . | 2-7/16" $\pm$ 3/32"                      |
| Diameter . . . . .                                      | 0.750" to 0.875"                         |
| Dimensional Outline (JEDEC No.6-4) . . . . .            | See <i>General Section</i>               |
| Bulb . . . . .                                          | T6-1/2                                   |
| Base . . . . .                                          | Small-Button Noval 9-Pin (JEDEC No.E9-1) |

Basing Designation for BOTTOM VIEW . . . . . 9CV

Pin 1—Do Not Use

Pin 2—Grid No.1

Pin 3—Cathode, Grid No.3

Pin 4—Heater

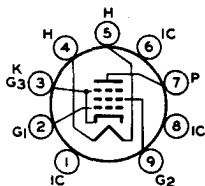
Pin 5—Heater

Pin 6—Do Not Use

Pin 7—Plate

Pin 8—Do Not Use

Pin 9—Grid No.2

AMPLIFIER — Class A<sub>1</sub>

## Characteristics:

|                                            |       |            |
|--------------------------------------------|-------|------------|
| Plate Voltage. . . . .                     | 170   | volts      |
| Grid-No.2 (Screen-Grid) Voltage. . . . .   | 170   | volts      |
| Grid-No.1 (Control-Grid) Voltage. . . . .  | -12.5 | volts      |
| Mu-Factor, Grid No.2 to Grid No.1. . . . . | 8     |            |
| Plate Resistance (Approx.) . . . . .       | 26000 | ohms       |
| Transconductance . . . . .                 | 11000 | $\mu$ mhos |
| Plate Current. . . . .                     | 70    | ma         |
| Grid-No.2 Current. . . . .                 | 3.5   | ma         |



# 6CW5

## Maximum Ratings, Design-Maximum Values:

|                                    |     |       |
|------------------------------------|-----|-------|
| Plate Supply Voltage . . . . .     | 600 | volts |
| Plate Voltage. . . . .             | 275 | volts |
| Grid No.2 Supply Voltage . . . . . | 600 | volts |
| Grid No.2 Voltage. . . . .         | 220 | volts |
| Average Cathode Current. . . . .   | 110 | ma    |
| Grid No.2 Input:                   |     |       |
| Peak . . . . .                     | 7   | watts |
| Average. . . . .                   | 2.1 | watts |
| Plate Dissipation. . . . .         | 14  | watts |

## Maximum Circuit Values:

|                                        |          |
|----------------------------------------|----------|
| Grid-No.1-Circuit Resistance . . . . . | 1 megohm |
|----------------------------------------|----------|

## VERTICAL-DEFLECTION AMPLIFIER

## Maximum Ratings, Design-Maximum Values:

*For operation in a 525-line, 30-frame system<sup>a</sup>*

|                                                |                   |       |
|------------------------------------------------|-------------------|-------|
| DC Plate Voltage . . . . .                     | 275               | volts |
| Peak Positive-Pulse Plate Voltage. . . . .     | 2200 <sup>b</sup> | volts |
| DC Grid-No.2 Voltage . . . . .                 | 275               | volts |
| Peak Negative-Pulse Grid-No.1 Voltage. . . . . | 250               | volts |
| Cathode Current:                               |                   |       |
| Peak . . . . .                                 | 240               | ma    |
| Average. . . . .                               | 110               | ma    |
| Grid No.2 Input. . . . .                       | 2.1               | watts |
| Plate Dissipation. . . . .                     | 12                | watts |

## Maximum Circuit Values:

|                                        |             |
|----------------------------------------|-------------|
| Grid-No.1-Circuit Resistance . . . . . | 2.2 megohms |
|----------------------------------------|-------------|

<sup>a</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

<sup>b</sup> Maximum pulse duration 6 percent of a cycle with a maximum of 1.2 milliseconds.

