

|                                                       |      |      |       |
|-------------------------------------------------------|------|------|-------|
| Plate Resistance (Approx.)                            | —    | 7200 | ohms  |
| Transconductance                                      | —    | 7700 | μmhos |
| Plate Current                                         | 230* | 5.5  | mA    |
| Grid-No.2 Current                                     | 21*  | 5.5  | mA    |
| Grid-No.1 Voltage (Approx.) for plate current of 1 mA | —    | —55  | volts |

\* This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

### Horizontal-Deflection Amplifier

For operation in a 525-line, 30-frame system

#### MAXIMUM RATINGS (Design-Center Values)

|                                                       |       |       |
|-------------------------------------------------------|-------|-------|
| DC Plate Voltage                                      | 700   | volts |
| Peak Positive-Pulse Plate Voltage# (Absolute Maximum) | 7000* | volts |
| Peak Negative-Pulse Plate Voltage                     | 1500  | volts |
| DC Grid-No.2 (Screen-Grid) Voltage                    | 175   | volts |
| Peak Negative-Pulse Grid-No.1 Voltage                 | 700   | volts |
| Peak Cathode Current                                  | 200   | mA    |
| Average Cathode Current                               | —200  | mA    |
| Plate Dissipation†                                    | 20    | watts |
| Grid-No.2 Input                                       | 3     | watts |
| Bulb Temperature (At hottest point)                   | 225   | °C    |

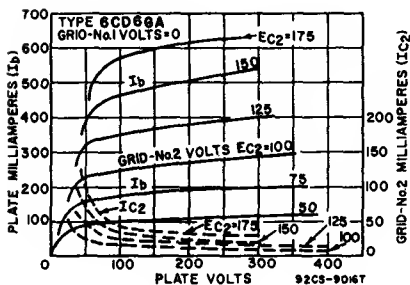
#### MAXIMUM CIRCUIT VALUE

Grid-No.-Circuit Resistance, for grid-resistor-bias operation . . . . . 0.47 megohm

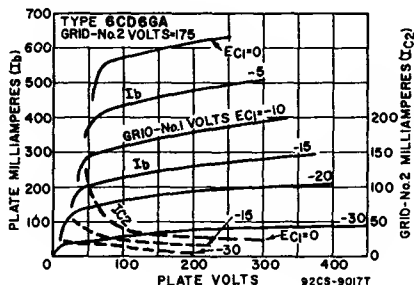
# Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

\* Under no circumstances should this absolute value be exceeded.

† A bias resistor or other means is required to protect the tube in absence of excitation.



6CE3



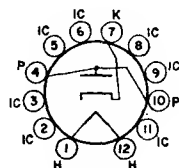
Refer to chart at end of section.  
For replacement use type 6CE3/6CD3/6DT3.

## 6CE3/ 6CD3/6DT3

34CE3

### HALF-WAVE VACUUM RECTIFIER

Duodecar type used as a damper diode in the horizontal-deflection circuit of color television receivers. Outlines section, 8G; requires duodecar 12-contact socket. Type 34CE3 is identical with type 6CE3/6CD3/6DT3 except for heater ratings.



12GK

|                                     |  | 6CE3/<br>6CD3/6DT3 | 34CE3 |         |
|-------------------------------------|--|--------------------|-------|---------|
| Heater Voltage (ac/dc)              |  | 6.3                | 34.5  | volts   |
| Heater Current                      |  | 2.5                | 0.45  | amperes |
| Heater Warm-up Time (Average)       |  | —                  | 11    | seconds |
| Direct Interelectrode Capacitances: |  |                    |       |         |
| Plate to Cathode and Heater         |  |                    | 13    | pF      |
| Cathode to Plate and Heater         |  |                    | 18    | pF      |
| Heater to Cathode                   |  |                    | 5.5   | pF      |

**Damper Service**

For operation in a 525-line, 30-frame system

**MAXIMUM RATINGS (Design-Maximum Values)**

|                                     |      |       |
|-------------------------------------|------|-------|
| Peak Inverse Plate Voltage#         | 5000 | volts |
| Peak Plate Current                  | 1500 | mA    |
| Average Plate Current               | 350  | mA    |
| Plate Dissipation                   | 11   | watts |
| Bulb Temperature (At hottest point) | 220  | °C    |
| Heater-Cathode Voltage              |      |       |
| Peak value                          | +300 | volts |
| Average value                       | +100 | volts |

**CHARACTERISTIC, Instantaneous Value**

Tube Voltage Drop for plate current of 680 mA ..... 20 volts

# Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

**6CE5**

Refer to chart at end of section.

For replacement use type 6BC5/6CE5.

**6CF6**

Refer to chart at end of section.

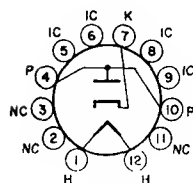
For replacement use type 6CB6A/6CF6.

**6CG3**

For replacement use type 6CG3/6BW3/6DQ3.

**6CG3/6BW3**

For replacement use type 6CG3/6BW3/6DQ3.

**HALF-WAVE  
VACUUM RECTIFIER****6CG3/  
6BW3/  
6DQ3****19CG3/19DQ3, 25CG3****12FX**

Duodecar type used as damper diode in horizontal-deflection circuits of color and black-and-white television receivers. Outlines section, 8G, requires duodecar 12-contact socket. Types 19CG3/19DQ3 and 25CG3 are identical with type 6CG3 except for heater ratings.

|                        | 6CG3/<br>6BW3/6DQ3 | 19CG3/<br>19DQ3 | 25CG3 |         |
|------------------------|--------------------|-----------------|-------|---------|
| Heater Voltage (ac/dc) | 6.3                | 19              | 25    | volts   |
| Heater Current         | 1.8                | 0.6             | 0.45  | amperes |
| Heater Warm-up Time    | —                  | 11              | 11    | seconds |

**Damper Service**

For operation in a 525-line, 30-frame system

**MAXIMUM RATINGS (Design-Maximum Values)**

|                             |      |       |
|-----------------------------|------|-------|
| Peak Inverse Plate Voltage# | 5000 | volts |
| Peak Plate Current          | 2100 | mA    |
| Average Plate Current       | 350  | mA    |
| Plate Dissipation           | 6.5  | watts |
| Heater-Cathode Voltage:     |      |       |
| Peak value                  | +300 | volts |
| Average value               | +100 | volts |

**CHARACTERISTIC, Instantaneous Value**

Tube Voltage Drop for plate current of 700 mA ..... 25 volts

# Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

Refer to chart at end of section.

For replacement use type 6CG3/6BW3/6DQ3.

**6CG3/6CD3**

For replacement use type 6FQ/6CG7.

**6CG7**

Refer to chart at end of section.

**6CG8**