

**MAXIMUM CIRCUIT VALUES**

Grid-No.1-Circuit Resistance:

For fixed-bias operation .....

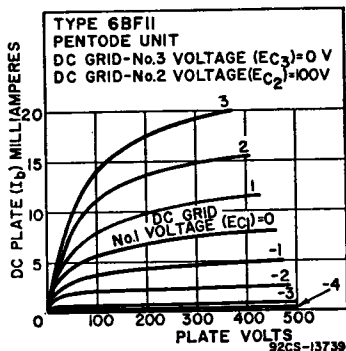
0.25

megohm

For cathode-bias operation .....

0.5

megohm

**6BG6G**  
**6BG6GA**

Refer to chart at end of section.

**6BH3**

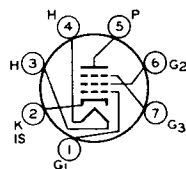
Refer to chart at end of section.

**6BH3A**

Refer to chart at end of section.

**6BH6****SHARP-CUTOFF PENTODE**

Miniature type used as rf amplifier particularly in ac/dc receivers and in mobile equipment where low heater-current drain is important. It is particularly useful in high-frequency, wide-band applications. Outlines section, 5C; requires miniature 7-contact socket.

**7CM**

|                                                                               |            |        |
|-------------------------------------------------------------------------------|------------|--------|
| Heater Voltage (ac/dc) .....                                                  | 6.3        | volts  |
| Heater Current .....                                                          | 0.15       | ampere |
| Peak Heater-Cathode Voltage .....                                             | ±90 max    | volts  |
| Direct Interelectrode Capacitances:*                                          |            |        |
| Grid No.1 to Plate .....                                                      | 0.0035 max | pF     |
| Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield ..... | 5.4        | pF     |
| Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield .....     | 4.4        | pF     |

\* Without external shield, or with external shield connected to cathode.

**Class A<sub>1</sub> Amplifier****MAXIMUM RATINGS (Design-Center Values)**

|                                                        |                    |       |
|--------------------------------------------------------|--------------------|-------|
| Plate Voltage .....                                    | 300                | volts |
| Grid-No.2 (Screen-Grid) Voltage .....                  | See curve page 300 | volts |
| Grid-No.2 Supply Voltage .....                         | 300                | volts |
| Grid-No.1 (Control-Grid) Voltage:                      |                    |       |
| Negative-bias value .....                              | 50                 | volts |
| Positive-bias value .....                              | 0                  | volts |
| Plate Dissipation .....                                | 3                  | watts |
| Grid-No.2 Input:                                       |                    |       |
| For grid-No.2 voltages up to 150 volts .....           | 0.5                | watt  |
| For grid-No.2 voltages between 150 and 300 volts ..... | See curve page 300 |       |

**CHARACTERISTICS**

|                                                              |                      |           |         |
|--------------------------------------------------------------|----------------------|-----------|---------|
| Plate Voltage .....                                          | 100                  | 250       | volts   |
| Grid No.3 .....                                              | Connected to cathode | at socket |         |
| Grid-No.2 Voltage .....                                      | 100                  | 150       | volts   |
| Grid-No.1 Voltage .....                                      | -1                   | -1        | volt    |
| Plate Resistance (Approx.) .....                             | 0.7                  | 1.4       | megohms |
| Transconductance .....                                       | 3400                 | 4600      | μmhos   |
| Plate Current .....                                          | 3.6                  | 7.4       | mA      |
| Grid-No.2 Current .....                                      | 1.4                  | 2.9       | mA      |
| Grid-No.1 Voltage (Approx.) for plate current of 10 μA ..... | -5                   | -7.7      | volts   |