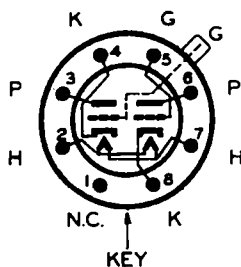
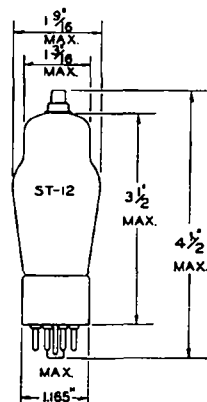


**KEN-RAD- 6C8G****Page One**GENERAL DESCRIPTION

**Application:** The 6C8G is a cathode type double-triode designed for use as a voltage amplifier. The cathode, grid, and plate of each triode are brought out to individual connections so that a number of specialized functions are possible. It is especially recommended for phase inverter service in automobile receivers and other applications where heater current consumption must be held to a minimum. The 6C8G is a glass tube equipped with an octal base.

**Physical Characteristics:**Bottom ViewRATING AND CHARACTERISTICS**Heater:**

Voltage  
Current

6.3 Volts AC or DC  
.3 Ampere

Note: Voltage between heater and cathode should be kept at a minimum if direct connection is not possible.

CLASS A AMPLIFIER - ONE TRIODE

|                      |        |              |
|----------------------|--------|--------------|
| Plate Voltage        | 250    | Volts Max.   |
| Grid Voltage         | -4.5   | Volts        |
| Plate Current        | 3.1    | Milliamperes |
| Plate Resistance     | 26,000 | Ohms         |
| Mutual Conductance   | 1,450  | Micromhos    |
| Amplification Factor | 38     |              |

TYPICAL PHASE INVERTER OPERATION

|                                             |         |         |              |
|---------------------------------------------|---------|---------|--------------|
| *Plate Supply Voltage                       | 250     | 250     | Volts        |
| Grid Voltage                                | -3.0    | -3.0    | Volts        |
| Plate Current Per Triode                    | 1.7     | 1.0     | Milliamperes |
| Plate Load Resistor                         | 50,000  | 100,000 | Ohms         |
| **Grid Return Resistance of Following Tubes | 100,000 | 500,000 | Ohms         |
| Voltage Amplification                       | 45      | 48      |              |
| Maximum Output Voltage                      | 60      | 80      | Volts RMS    |
| ***Self-Biasing Resistor                    | 900     | 1,500   | Ohms         |

\*Effective plate voltage will be this value minus the voltage drop in the plate resistor.

\*\*For values of voltage divider to inverter grid see figure on page 2.

\*\*\*No by-pass condenser necessary in this application.

Direct Interelectrode Capacitances:

|                  |      |       |      |
|------------------|------|-------|------|
| C <sub>G-P</sub> | 02.4 | 002.5 | μf.  |
| C <sub>G-K</sub> | 02.5 | 003.4 | μf.  |
| C <sub>P-K</sub> | 03.9 | 003.5 | μf.  |
| C <sub>G-G</sub> |      | .1    | μμf. |
| C <sub>P-P</sub> |      | 1.5   | μμf. |

0 Values for triode having its grid brought out to the top cap.

00 Values for triode having its grid brought out to a base pin.