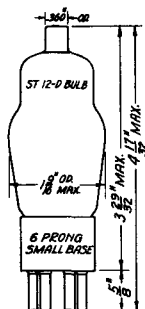
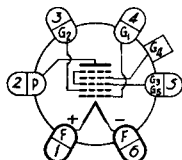


HEPTODE  
PENTAGRID CONVERTER

Filament Type Glass Bulb



The 1C6 is a pentagrid type converter tube designed for service as a combined mixer and oscillator in battery operated superheterodyne receivers. The ratings and electrical characteristics are identical with those of the type 1C7G.



BOTTOM VIEW OF SOCKET

RATINGS

|                         |               |
|-------------------------|---------------|
| Filament Voltage        | 2.0 d-c volts |
| Filament Current        | 0.12 amp      |
| Maximum Plate Voltage   | 180 volts     |
| Maximum Screen Voltage  | 67.5 volts    |
| Maximum Grid #2 Voltage | 135 volts     |
| Maximum Grid #2 Supply  | 180† volts    |
| Minimum Grid #4 Bias    | -3 volts      |
| Maximum Cathode Current | 9 ma          |

DIRECT INTERELECTRODE CAPACITANCES (approximate)

|                                             |       |    |
|---------------------------------------------|-------|----|
| Grid #4 to Plate                            | 0.3 * | μf |
| Grid #4 to Grid #2                          | 0.3 * | μf |
| Grid #4 to Grid #1                          | 0.15* | μf |
| Grid #1 to Grid #2                          | 1.5   | μf |
| Grid #4 to all other Elements (r-f input)   | 10    | μf |
| Grid #1 to all other Elements (osc. input)  | 6     | μf |
| Grid #2 to all other Elements (osc. output) | 6     | μf |
| Plate to all other Elements (mixer output)  | 10    | μf |

FREQUENCY CONVERTER - SUPERHETERODYNE CIRCUIT

|                                     |       |       |        |
|-------------------------------------|-------|-------|--------|
| Plate Voltage                       | 135   | 180   | volts  |
| Screen(Grids #3 and #5) Voltage     | 67.5  | 67.5  | volts  |
| Anode Grid (#2) Supply Voltage      | 135 † | 180 † | volts  |
| Control Grid (#4) Bias              | -3    | -3    | volts  |
| Oscillator Grid (#1) Resistor       | 50000 | 50000 | ohms   |
| Plate Resistance                    | 0.55  | 0.75  | megohm |
| Conversion Conductance              | 300   | 325   | μmhos  |
| Plate Current                       | 1.3   | 1.5   | ma     |
| Screen Current (approximate)        | 2     | 2     | ma     |
| Anode Grid Current                  | 2.6   | 3.3   | ma     |
| Oscillator Grid Current             | 0.2   | 0.2   | ma     |
| Total Cathode Current (approximate) | 6.5   | 7     | ma     |
| Control Grid Bias                   | -14   | -14   | volts  |

(For conversion conductance = 4 μmhos)

With plate voltage = 135 to 180 volts, screen voltage = 67.5 volts, anode grid voltage = 135 volts (no series resistor), control grid bias = -3 volts, and oscillator grid voltage = 0 volts, the transconductance of the oscillator section (not oscillating) is 1000 μmhos, and the anode grid current is 4.9 ma.

†Applied through a 20000 ohm series resistor, bypassed by a 0.1 μf. condenser.

\*With tube shield.

