6SL7-GT—12SL7-GT

TWIN TRIODE

DESCRIPTION AND RATING

The 6SL7-GT is a high-mu twin triode designed for use in resistance-coupled circuits as a voltage amplifier or phase inverter.

The 12SL7-GT is identical to the 6SL7-GT except for heater ratings.

GENERAL

ELECTRICAL
Cathode—Coated Unipotential
Heater Voltage, AC or DC 6.3 12.6 Volts
Heater Current 0.3 0.15 Amperes

MECHANICAL
Mounting Position—Any
Envelope—T-9, Glass
Base—B8-6, Intermediate-Shell Octal 8-Pin
or B8-46, Short Intermediate-Shell Octal 8-Pin

MAXIMUM RATINGS

DESIGN-CENTER VALUES, EACH SECTION
Plate Voltage 300 Volts
Positive DC Grid Voltage 0 Volts
Plate Dissipation 1.0 Watts
Heater-Cathode Voltage
Heater Positive with Respect to Cathode 90 Volts
Heater Negative with Respect to Cathode 90 Volts

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A1 AMPLIFIER, EACH SECTION
Plate Voltage 250 Volts
Grid Voltage −2.0 Volts
Amplification Factor 70
Plate Resistance, approximate 44000 Ohms
Transconductance 1600 Micromhos
Plate Current 2.3 Milliamperes

GENERAL ELECTRIC

Supersedes ET-T339, dated 5-46
# CLASS A RESISTANCE-COUPLED AMPLIFIER

## EACH SECTION

<table>
<thead>
<tr>
<th>Rp (Meg.)</th>
<th>Rs (Meg.)</th>
<th>Rg1 (Meg.)</th>
<th>Ebb = 90 Volts</th>
<th>Gain</th>
<th>Eo</th>
<th>Ebb = 180 Volts</th>
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**Note:** Coupling capacitors (C) should be selected to give desired frequency response. Rk should be adequately by-passed.

**Notes:**
1. Eo is maximum RMS voltage output for five percent (5%) total harmonic distortion.
2. Gain measured at 2.0 volts RMS output.
3. For zero-bias data, generator impedance is negligible.

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## AVERAGE CHARACTERISTICS

**EACH SECTION**

![Graph of average characteristics](image-url)

- $E_f = \text{RATED VALUE}$
- $E_b = 250 \text{ VOLTS}$
- $E_b = 250 \text{ VOLTS}$

**Axis Labels:**
- **Y-axis:** Amplification Factor (A), Plate Resistance (Rp), Transconductance (Gm)
- **X-axis:** Plate Current in Milliamperes