The 12AX7LPS is a high mu dual triode with a spiral filament. The lower ac stray-field sensitivity, combined with excellent linearity, make for a superior 12AX7 replacement.

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plate 2</td>
</tr>
<tr>
<td>2</td>
<td>Grid 2</td>
</tr>
<tr>
<td>3</td>
<td>Cathode 2</td>
</tr>
<tr>
<td>4, 5, 9</td>
<td>Heater</td>
</tr>
<tr>
<td>6</td>
<td>Plate 1</td>
</tr>
<tr>
<td>7</td>
<td>Grid 1</td>
</tr>
<tr>
<td>8</td>
<td>Cathode 1</td>
</tr>
</tbody>
</table>

**Electrical Data**

- **Heater Voltage, not less than**: 6.0 or 12.0 V
- **Heater Voltage, not more than**: 6.6 or 13.2 V
- **Plate Voltage, not more than**: 330 V
- **Heater to Cathode Voltage**:
  - Positive, V not more than: 200 V
  - Negative, V not less than: 200 V
- **Plate Current, not more than**: 9 mA
- **Plate Dissipation, each triode, not more than**: 1.2 watts
- **Maximum grid circuit resistance**:
  - Fixed bias, not more than: 1 Mohm
  - Self bias, not more than: 2.2 Mohm
- **Amplification Factor (nominal)**: 94
- **Transconductance (nominal)**: 1.7 mA/V
- **Plate Resistance (nominal)**: 56.0 kΩ

**Inter-electrode Capacitances**:

- C, grid to plate: 1.7 pF (triode 1 and 2)
- C, grid to cathode and heater: 1.6 pF (triode 1 and 2)
- C, plate to cathode and heater: 0.46 pF (1) and 0.38 (2)
- C, cathode to heater: 5.0 nF (nominal)
- C, plate to plate: 600 pF

**Measured Electrical Minima**:

- Grid reverse current, not more than (see note below): 0.2 μA
- Plate current, not less than (see note below): 0.75 mA
- Plate current (E_b = 250V, E_c = -4V): 10 μA
- Transconductance, not less than (see note below): 1.4 mA/V
- Amplification Factor, not less than (see note below): 78

*NOTE: heater V, 12.6 vac; plate V, 250v; grid bias, -2v; grid circuit resistance, 1K Ωhm*