SYLVANIA TYPE 12DU7

MECHANICAL DATA
- Bulb: T-6½
- Base: E9-1, Miniature Button 9-Pin
- Outline: 6-2
- Basing: 9J X
- Cathode: Coated Unipotential
- Mounting Position: Any

ELECTRICAL DATA

HEATER CHARACTERISTICS
- Heater Voltage: 12.6 Volts
- Heater Current: 250 Ma
- Heater-Cathode Voltage (Design Maximum Values): 16 Volts
- Heater Negative with Respect to Cathode: 16 Volts
- Heater Positive with Respect to Cathode: 16 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

<table>
<thead>
<tr>
<th>Tetrode Section</th>
<th>Grid No. 1 to Plate</th>
<th>Input: g1 to (h + Tk + g2)</th>
<th>Output: p to (h + Tk + g2)</th>
<th>Grid No. 1 to Diode Plate No. 1</th>
<th>Grid No. 1 to Diode Plate No. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.6 μf</td>
<td>0.6 μf</td>
<td>0.6 μf</td>
<td>0.6 μf Max.</td>
<td>0.6 μf Max.</td>
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MAXIMUM RATINGS (Design Maximum Values)
- Plate Voltage: 16 Volts
- Grid No. 2 Voltage: 16 Volts
- Grid No. 1 Resistance: 10 Megohms
- Average Diode Current (Each Diode): 1.0 Ma

CHARACTERISTICS AND TYPICAL OPERATING CONDITIONS
- Plate Voltage: 12.6 Volts
- Grid No. 2 Voltage: 12.6 Volts
- Grid No. 1 Resistor: 2.2 Megohms
- AF Grid Voltage (RMS): 1.6 Volts
- Plate Current: 12 Ma
- Grid No. 2 Current: 1.5 Ma
- Transconductance: 6200 μmhos
- Plate Resistance (approx.): 6000 Ohms
- Load Resistance: 2700 Ohms
- Maximum Signal Power Output: 25 W
- Total Harmonic Distortion: 10 Percent
- Average Diode Current with 10 Volts D C Applied, Each Diode: 1.3 Ma

NOTES:
1. This tube is intended for use in automobile radios operated from a nominal 12 volt battery. Design of the tube is such that the heater will operate satisfactorily over the range 10.0 volts to 15.9 volts, and that the maximum ratings provide a safety factor for the wide voltage variation encountered with this type of supply.
2. Design-Maximum Ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions.
3. Average contact potential bias developed across specified grid resistor.

APPLICATION
Type 12DU7 is a miniature duo-diode tetrode designed for use as a combined detector, AVC rectifier and audio power amplifier driver. It is designed for operation where the heater, plate and Grid No. 2 voltages are obtained directly from a 12 volt automotive storage battery.

SYLVANIA ELECTRONIC TUBES
111-1-4-59