ADVANCE DATA

MECHANICAL DATA

Bulb T-3
Base E8-10, Subminiature Button Flexible Leads
Outline 3-1
Basing 8DL
Cathode Coated Unipotential
Mounting Position Any

RATINGS (Absolute Values)

Impact Acceleration$^2$ 450 g Max.
Vibrational Acceleration for Extended Periods$^3$ 2.5 g Max.
Bulb Temperature (At Hottest Point) 300° C Max.

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage, ±5%$^4, 5$ (Absolute Values) 6.3 Volts
Heater Current 150 Ma
Heater-Cathode Voltage (Absolute Values)
   Heater Negative with Respect to Cathode 200 Volts Max.
   Heater Positive with Respect to Cathode 200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Shielded)$^4$

Grid No. 1 to Plate .009 µf Max.
Input: g1 to (h+k+g3+g2+E,S.) 3.6 µf
Output: p to (h+k+g3+g2+E,S.) 3.8 µf

RATINGS (Absolute Values)$^1$

Plate Voltage, DC 165 Volts Max.
Grid No. 2 Voltage, DC 155 Volts Max.
Plate Dissipation 1.1 Watts Max.
Grid No. 2 Dissipation 0.55 Watts Max.
Cathode Current 16.5 Ma Max.
Negative Grid No. 1 Voltage 55 Volts Max.

from JETEC release #1401, Jan. 17, 1955
**SYLVANIA**

6049

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**CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Plate Voltage</td>
<td>100 Volts</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>100 Volts</td>
</tr>
<tr>
<td>Cathode Bias Resistor</td>
<td>150 Ohms</td>
</tr>
<tr>
<td>Plate Current</td>
<td>7.5 Ma</td>
</tr>
<tr>
<td>Grid No. 2 Current</td>
<td>2.5 Ma</td>
</tr>
<tr>
<td>Transconductance</td>
<td>3550 µmhos</td>
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<tr>
<td>Plate Resistance (approx.)</td>
<td>0.4 Megohm</td>
</tr>
<tr>
<td>Grid No. 1 Voltage for Gm = 25 µmhos</td>
<td>-25 Volts</td>
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<tr>
<td>Noise Output Voltage (Maximum)</td>
<td>1.00 Mv</td>
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</table>

**Life Expectancy**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>300° C Ambient</td>
<td>5000</td>
</tr>
<tr>
<td>250° C Ambient</td>
<td>1000</td>
</tr>
</tbody>
</table>

**NOTES:**

1. Limitations beyond which normal tube performance and tube life may be impaired.

2. Forces in any direction as applied by the Navy Type High Impact (Flyweight) Shock Machine for Electronic Devices, or equivalent.

3. Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours.

4. With external shield of 0.405 inch diameter connected to cathode.

5. Tube life and reliability of performance are directly related to the degree of regulation of the heater voltage to its center-rated value of 6.3 volts.

6. Across plate resistor of 10,000 ohms with applied vibrational acceleration of 15 g at 40 cycles per second.