FEATURES
* Power dissipation
  \( P_{\text{CM}} \): 0.6 W (\( T_{\text{amb}} = 25^\circ \text{C} \))
* Collector current
  \( I_{\text{CM}} \): 0.6 A
* Collector-base voltage
  \( V_{\text{BRCEO}} \): 60 V
* Operating and storage junction temperature range
  \( T_J, T_{\text{stg}} \): -55°C to +150°C

MECHANICAL DATA
* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Marking: 2N4401+Date code

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS ( @ \( T_a = 25^\circ \text{C} \) unless otherwise noted)

<table>
<thead>
<tr>
<th>RATING</th>
<th>SYMBOL</th>
<th>VALUE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Steady State Power Dissipation (1) @( T_a = 25^\circ \text{C} ) Derate above 25°C</td>
<td>( P_{\text{D}} )</td>
<td>600</td>
<td>mW</td>
</tr>
<tr>
<td>Max. Operating Temperature Range</td>
<td>( T_J )</td>
<td>150</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>( T_{\text{stg}} )</td>
<td>-55 to +150</td>
<td>°C</td>
</tr>
</tbody>
</table>

ELECTRICAL CHARACTERISTICS ( @ \( T_a = 25^\circ \text{C} \) unless otherwise noted)

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>SYMBOL</th>
<th>MIN.</th>
<th>TYP.</th>
<th>MAX.</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Resistance Junction to Ambient</td>
<td>( R_{\text{thJ}} )</td>
<td>-</td>
<td>-</td>
<td>417</td>
<td>°C/W</td>
</tr>
</tbody>
</table>

Notes:
1. Alumina=0.4"x0.3"x0.024 in.99.5% alumina
2. "ROHS Compliant"
RATING AND CHARACTERISTICS CURVES (2N4401)

Figure 1. Capacitances

Figure 2. Charge Data

Figure 3. Turn-On Time

Figure 4. Rise and Fall Times

Figure 5. Storage Time

Figure 6. Fall Time
RATING AND CHARACTERISTICS CURVES (2N4401)

Figure 13. DC Current Gain

Figure 14. Collector Saturation Region

Figure 15. "ON" Voltages

Figure 16. Temperature Coefficients
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