1SS368

Silicon Epitaxial Planar Switching Diode

Features
• Small package
• Low forward voltage
• Fast reverse recovery time
• Small total capacitance

Applications
• Ultra high speed switching

Absolute Maximum Ratings (T_a = 25 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum (Peak) Reverse Voltage</td>
<td>V_RM</td>
<td>85</td>
<td>V</td>
</tr>
<tr>
<td>Reverse Voltage</td>
<td>V_R</td>
<td>80</td>
<td>V</td>
</tr>
<tr>
<td>Average Rectified Forward Current</td>
<td>I_F(AV)</td>
<td>100</td>
<td>mA</td>
</tr>
<tr>
<td>Maximum (Peak) Forward Current</td>
<td>I_FM</td>
<td>200</td>
<td>mA</td>
</tr>
<tr>
<td>Surge Forward Current (10 ms)</td>
<td>I_FSM</td>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>Power Dissipation</td>
<td>P_tot</td>
<td>150</td>
<td>mW</td>
</tr>
<tr>
<td>Junction Temperature</td>
<td>T_j</td>
<td>150</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>T_stg</td>
<td>-55 to +150</td>
<td>°C</td>
</tr>
</tbody>
</table>

Characteristics at T_a = 25 °C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Voltage at I_F = 100 mA</td>
<td>V_F</td>
<td>1.2</td>
<td>V</td>
</tr>
<tr>
<td>Reverse Current at V_R = 30 V</td>
<td>I_R</td>
<td>0.1</td>
<td>μA</td>
</tr>
<tr>
<td>at V_R = 80 V</td>
<td></td>
<td>0.5</td>
<td>μA</td>
</tr>
<tr>
<td>Total Capacitance at V_R = 0, f = 1 MHz</td>
<td>C_T</td>
<td>3</td>
<td>pF</td>
</tr>
<tr>
<td>Reverse Recovery Time at I_F = I_R = 10 mA, I_R = 0.1 X I_R, R_L = 100 Ω</td>
<td>t_rr</td>
<td>4</td>
<td>ns</td>
</tr>
</tbody>
</table>
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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

<table>
<thead>
<tr>
<th>UNIT</th>
<th>A</th>
<th>b_p</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>H_E</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>1.10</td>
<td>0.80</td>
<td>0.40</td>
<td>0.15</td>
<td>1.80</td>
<td>1.35</td>
</tr>
</tbody>
</table>