BAS81

Silicon Schottky Barrier Diodes

for general purpose applications

Absolute Maximum Ratings (Ta = 25 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Reverse Voltage</td>
<td>V_RRM</td>
<td>40</td>
<td>V</td>
</tr>
<tr>
<td>Continuous Forward Current</td>
<td>I_F</td>
<td>30</td>
<td>mA</td>
</tr>
<tr>
<td>Repetitive Peak Forward Current t_p ≥ 1 s, δ ≤ 0.5</td>
<td>I_FRM</td>
<td>150</td>
<td>mA</td>
</tr>
<tr>
<td>Repetitive Peak Forward Current t_p = 1 s</td>
<td>I_FSM</td>
<td>500</td>
<td>mA</td>
</tr>
<tr>
<td>Thermal Resistance from Junction to Ambient</td>
<td>R_JJA</td>
<td>320</td>
<td>K/W</td>
</tr>
<tr>
<td>Junction Temperature</td>
<td>T_j</td>
<td>125</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>T_stg</td>
<td>-65 to +150</td>
<td>°C</td>
</tr>
</tbody>
</table>

Characteristics at Ta = 25 °C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Voltage</td>
<td>V_F</td>
<td>0.33</td>
<td>V</td>
</tr>
<tr>
<td>at I_F = 0.1 mA</td>
<td></td>
<td>0.41</td>
<td>V</td>
</tr>
<tr>
<td>at I_F = 1 mA</td>
<td></td>
<td>1</td>
<td>V</td>
</tr>
<tr>
<td>at I_F = 15 mA</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Reverse Current</td>
<td>I_R</td>
<td>200</td>
<td>nA</td>
</tr>
<tr>
<td>at V_R = 40</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total Capacitance</td>
<td>C_tot</td>
<td>1.6</td>
<td>pF</td>
</tr>
<tr>
<td>at V_R = 2 V, f = 1 MHz</td>
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</tr>
</tbody>
</table>
Forward current as a function of forward voltage; typical values.

Reverse current as a function of reverse voltage; typical values.

Diode capacitance as a function of reverse voltage; typical values.

f = 1 MHz.