Features

- Low forward voltage drop.
- High current capability.
- Easy pick and place.
- High surge current capability.

General Purpose Rectifiers (Glass Passivated)

Absolute Maximum Ratings*  \( T_a = 25^\circ C \) unless otherwise noted

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>( V_{FBM} )</td>
<td>Maximum Repetitive Reverse Voltage</td>
<td>50 100 200 400 600 800 1000</td>
<td>V</td>
</tr>
<tr>
<td>( I_{F}(AV) )</td>
<td>Average Rectified Forward Current, @ ( T_a = 125^\circ C )</td>
<td>1.0</td>
<td>A</td>
</tr>
<tr>
<td>( I_{FSM} )</td>
<td>Non-repetitive Peak Forward Surge Current</td>
<td>30</td>
<td>A</td>
</tr>
<tr>
<td>( T_{STG} )</td>
<td>Storage Temperature Range</td>
<td>-65 to +175</td>
<td>°C</td>
</tr>
<tr>
<td>( T_J )</td>
<td>Operating Junction Temperature</td>
<td>-65 to +175</td>
<td>°C</td>
</tr>
</tbody>
</table>

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>( P_D )</td>
<td>Power Dissipation</td>
<td>1.8</td>
<td>W</td>
</tr>
<tr>
<td>( R_{JAA} )</td>
<td>Thermal Resistance, Junction to Ambient*</td>
<td>80</td>
<td>°C/W</td>
</tr>
<tr>
<td>( R_{JAL} )</td>
<td>Thermal Resistance, Junction to Lead*</td>
<td>26</td>
<td>°C/W</td>
</tr>
</tbody>
</table>

*Device mounted on PCB with 0.2 x 0.2" (5.0 x 5.0 mm) copper pad areas.

Electrical Characteristics  \( T_a = 25^\circ C \) unless otherwise noted

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Device</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>( V_F )</td>
<td>Forward Voltage @ 1.0 A</td>
<td>1.0 1.2</td>
<td>V</td>
</tr>
<tr>
<td>( I_{TR} )</td>
<td>Reverse Recovery Time</td>
<td>2.0</td>
<td>μs</td>
</tr>
<tr>
<td>( I_{R} )</td>
<td>Reverse Current @ rated ( V_R )</td>
<td>( T_a = 25^\circ C ) 5.0</td>
<td>μA</td>
</tr>
<tr>
<td>( C_T )</td>
<td>Total Capacitance</td>
<td>15</td>
<td>pF</td>
</tr>
</tbody>
</table>

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Typical Characteristics

- Average Rectified Forward Current, $I_{F}$ [mA]
- Forward Voltage, $V_{F}$ [V]
- Total Capacitance, $C_{T}$ [pF]

Figure 1. Forward Current Derating Curve
Figure 2. Non-Repetitive Surge Current
Figure 3. Forward Voltage Characteristics
Figure 4. Reverse Current vs Reverse Voltage
Figure 5. Total Capacitance
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