# 1N5391 - 1N5399

## General Purpose Rectifiers

### Features
- 1.5 ampere operation at $T_A = 70°C$ with no thermal runaway.
- High current capability.
- Low leakage.

### Absolute Maximum Ratings

* $T_A = 25°C$ unless otherwise noted

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Value</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>$V_{RRM}$</td>
<td>Peak Repetitive Reverse Voltage</td>
<td>50 100 200 300 400 500 600 800 1000</td>
<td>V</td>
</tr>
<tr>
<td>$I_{F(AV)}$</td>
<td>Average Rectified Forward Current</td>
<td>1.5</td>
<td>A</td>
</tr>
<tr>
<td>$I_{FSM}$</td>
<td>Non-repetitive Peak Forward Surge Current</td>
<td>50</td>
<td>A</td>
</tr>
<tr>
<td>$T_{STG}$</td>
<td>Storage Temperature Range</td>
<td>-55 to +150</td>
<td>°C</td>
</tr>
<tr>
<td>$T_J$</td>
<td>Operating Junction Temperature</td>
<td>-55 to +150</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>
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</tr>
</thead>
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<tr>
<td>$P_D$</td>
<td>Power Dissipation</td>
<td>4.8</td>
<td>W</td>
</tr>
<tr>
<td>$R_{\text{JL}}$</td>
<td>Thermal Resistance, Junction to Lead</td>
<td>26</td>
<td>°C/W</td>
</tr>
</tbody>
</table>

* Mounted on 0.375" (9.5mm) PCB

### Electrical Characteristics

* $T_A = 25°C$ unless otherwise noted

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</tr>
</thead>
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<tr>
<td>$V_F$</td>
<td>Forward Voltage</td>
<td>1.4</td>
<td>V</td>
</tr>
<tr>
<td>$I_R$</td>
<td>Reverse Leakage</td>
<td>5.0</td>
<td>μA</td>
</tr>
<tr>
<td>$C_T$</td>
<td>Total Capacitance</td>
<td>25</td>
<td>pF</td>
</tr>
</tbody>
</table>
Typical Performance Characteristics

Figure 1. Forward Current Derating Curve

Figure 2. Forward Voltage Characteristics

Figure 3. Non-Repetitive Surge Current

Figure 4. Total Capacitance
PRODUCT STATUS DEFINITIONS

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