1N3064
Small Signal Diode

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>( V_{RRM} )</td>
<td>Maximum Repetitive Reverse Voltage</td>
<td>75</td>
<td>V</td>
</tr>
<tr>
<td>( I_{F(AV)} )</td>
<td>Average Rectified Forward Current</td>
<td>300</td>
<td>mA</td>
</tr>
<tr>
<td>( I_{FSM} )</td>
<td>Non-repetitive Peak Forward Surge Current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulse Width = 1.0 second</td>
<td>1.0</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Pulse Width = 1.0 microsecond</td>
<td>4.0</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>( T_{STG} )</td>
<td>Storage Temperature Range</td>
<td>-65 to +200</td>
<td>°C</td>
</tr>
<tr>
<td>( T_J )</td>
<td>Operating Junction Temperature</td>
<td>175</td>
<td>°C</td>
</tr>
</tbody>
</table>

* These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:
1) These ratings are based on a maximum junction temperature of 200 degrees C.
2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>( P_D )</td>
<td>Power Dissipation</td>
<td>500</td>
<td>mW</td>
</tr>
<tr>
<td>( R_{J,A} )</td>
<td>Thermal Resistance, Junction to Ambient</td>
<td>300</td>
<td>°C/W</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min.</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>( V_R )</td>
<td>Breakdown Voltage</td>
<td>( I_R = 5\mu A )</td>
<td>75</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>( V_F )</td>
<td>Forward Voltage</td>
<td>( I_F = 250\mu A )</td>
<td>505</td>
<td>575</td>
<td>mV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( I_F = 1mA )</td>
<td>550</td>
<td>650</td>
<td>mV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( I_F = 2mA )</td>
<td>610</td>
<td>710</td>
<td>mV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( I_F = 10mA )</td>
<td></td>
<td>1.0</td>
<td>V</td>
</tr>
<tr>
<td>( I_R )</td>
<td>Reverse Leakage</td>
<td>( V_R = 50V )</td>
<td>100</td>
<td></td>
<td>nA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( V_R = 50V, T_A = 150^\circ C )</td>
<td>100</td>
<td></td>
<td>µA</td>
</tr>
<tr>
<td>( C_T )</td>
<td>Total Capacitance</td>
<td>( V_R = 0, f = 1.0MHz )</td>
<td>2</td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>( t_{rr} )</td>
<td>Reverse Recovery Time</td>
<td>( I_F = I_R = 10mA, R_L = 100\Omega, I_{rr} = 1mA )</td>
<td>4</td>
<td></td>
<td>ns</td>
</tr>
</tbody>
</table>
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