# 1N5817 - 1N5819

## Features
- 1.0 ampere operation at $T_A = 90^\circ$C with no thermal runaway.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.

## Schottky Rectifiers

### Absolute Maximum Ratings

<table>
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<th>Symbol</th>
<th>Parameter</th>
<th>Value</th>
<th>Units</th>
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<tbody>
<tr>
<td>$V_{RMM}$</td>
<td>Maximum Repetitive Reverse Voltage</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>$I_{F(AV)}$</td>
<td>Average Rectified Forward Current</td>
<td>1.0</td>
<td>A</td>
</tr>
<tr>
<td>$I_{FSM}$</td>
<td>Non-repetitive Peak Forward Surge Current</td>
<td>25</td>
<td>A</td>
</tr>
<tr>
<td>$T_{Stg}$</td>
<td>Storage Temperature Range</td>
<td>-65 to +125</td>
<td>°C</td>
</tr>
<tr>
<td>$T_J$</td>
<td>Operating Junction Temperature</td>
<td>-65 to +125</td>
<td>°C</td>
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</table>

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

### Thermal Characteristics

<table>
<thead>
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<th>Symbol</th>
<th>Parameter</th>
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<th>Units</th>
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<tr>
<td>$P_D$</td>
<td>Power Dissipation</td>
<td>1.25</td>
<td>W</td>
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<tr>
<td>$R_{JA}$</td>
<td>Thermal Resistance, Junction to Ambient</td>
<td>80</td>
<td>°C/W</td>
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### Electrical Characteristics

<table>
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<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Device</th>
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<tr>
<td>$V_F$</td>
<td>Forward Voltage</td>
<td>450</td>
<td>550</td>
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<tr>
<td>$I_R$</td>
<td>Reverse Current @ rated $V_R$</td>
<td>0.5</td>
<td>mA</td>
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<tr>
<td>$C_T$</td>
<td>Total Capacitance</td>
<td>110</td>
<td>pF</td>
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$T_A = 25^\circ$C unless otherwise noted
Typical Characteristics

Figure 1. Forward Current Derating Curve

Figure 2. Forward Voltage Characteristics

Figure 3. Non-Repetitive Surge Current

Figure 4. Total Capacitance
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