

**Feature**
- Low forward voltage drop
- Isolation voltage 2000V ~
- Small volume, light weight
- Low thermal resistance, high heat-conductivity, low temperature rise
- UL certification No.E304417

**Application**
- Power supply for DC power device
- Input rectifier for PWM converter
- Inverter welding machine

### Maximum value

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Rating</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_{\text{RRM}}$</td>
<td>Reverse peak repetitive voltage</td>
<td>BR 1506, 1508, 1510</td>
<td>V</td>
</tr>
<tr>
<td>$V_{\text{RSM}}$</td>
<td>Reverse peak non-repetitive voltage</td>
<td>700, 800, 1000</td>
<td>V</td>
</tr>
</tbody>
</table>

### Electrical characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Test condition</th>
<th>Max value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$I_{\text{RRM}}$</td>
<td>Peak reverse repetitive current</td>
<td>$V_{e}=V_{\text{RRM}}, T_{j}=25\degree\mathrm{C}$</td>
<td>5</td>
<td>μA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$V_{e}=V_{\text{RRM}}, T_{j}=150\degree\mathrm{C}$</td>
<td>3</td>
<td>mA</td>
</tr>
<tr>
<td>$V_{\text{FM}}$</td>
<td>Peak forward voltage</td>
<td>$I_{\text{FM}}=7.5\mathrm{~A}, T_{j}=25\degree\mathrm{C}$</td>
<td>1.1</td>
<td>V</td>
</tr>
<tr>
<td>$R_{\text{th(j-c)}}$</td>
<td>Thermal impedance (junction-case)</td>
<td>Single-sided heat dissipation, sine half-wave</td>
<td>1.2</td>
<td>°C/W</td>
</tr>
</tbody>
</table>
Single-phase Bridge Rectifier

BR1510

Forward characteristics curve

- Peak forward voltage (V)
- Forward average current (A)
- Peak forward voltage (V)
- Forward average current (A)

Case temperature vs forward average current

- Forward average current (A)
- Case temperature (°C)

Forward surge current vs cycles

- Forward surge current (A)
- Cycles @50Hz