Silicon Bridge Rectifier

Features
- Types up to 1000 V $V_{RRM}$
- Ideal for printed circuit board
- Built-in printed circuit board stand-offs
- High temperature soldering guaranteed 265°C/10 seconds
- High case dielectric strength
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data
Case: Reliable low cost construction
Weight: 0.065 oz, 2.2 g
Mounting position: Any
Terminals: Plated leads, solderable per MIL-STD-202, Method 208

Maximum ratings, at $T_j = 25 ^\circ C$, unless otherwise specified

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Conditions</th>
<th>KBP206</th>
<th>KBP208</th>
<th>KBP210</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetitive peak reverse voltage</td>
<td>$V_{RRM}$</td>
<td></td>
<td>600</td>
<td>800</td>
<td>1000</td>
<td>V</td>
</tr>
<tr>
<td>RMS reverse voltage</td>
<td>$V_{RMS}$</td>
<td></td>
<td>420</td>
<td>560</td>
<td>700</td>
<td>V</td>
</tr>
<tr>
<td>DC blocking voltage</td>
<td>$V_{DC}$</td>
<td></td>
<td>600</td>
<td>800</td>
<td>1000</td>
<td>V</td>
</tr>
<tr>
<td>Continuous forward current</td>
<td>$I_F$</td>
<td>$T_C \leq 50 ^\circ C$</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>A</td>
</tr>
<tr>
<td>Surge non-repetitive forward current, Half Sine Wave</td>
<td>$I_{F,SM}$</td>
<td>$T_C = 25 ^\circ C$, $t_p = 8.3$ ms</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>A</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>$T_j$</td>
<td></td>
<td>-50 to 150</td>
<td>-50 to 150</td>
<td>-50 to 150</td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>$T_{stg}$</td>
<td></td>
<td>-50 to 150</td>
<td>-50 to 150</td>
<td>-50 to 150</td>
<td>°C</td>
</tr>
</tbody>
</table>

Electrical characteristics, at $T_j = 25 ^\circ C$, unless otherwise specified

<table>
<thead>
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<th>KBP210</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diode forward voltage</td>
<td>$V_F$</td>
<td>$I_F = 2$ A, $T_j = 25 ^\circ C$</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>V</td>
</tr>
<tr>
<td>Reverse current</td>
<td>$I_R$</td>
<td>$V_R = 50$ V, $T_j = 25 ^\circ C$</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>μA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$V_R = 50$ V, $T_j = 100 ^\circ C$</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>μA</td>
</tr>
</tbody>
</table>

Thermal characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Conditions</th>
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<th>KBP208</th>
<th>KBP210</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal resistance, junction - case</td>
<td>$R_{thJC}$</td>
<td></td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
<td>°C/W</td>
</tr>
</tbody>
</table>
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GeneSiC Semiconductor:

KBP204  KBP206  KBP208  KBP210G  KBP202G  KBP206G  KBP204G  KBP203G  KBP208G  KBP201G