RBV401 - RBV406

PRV : 100 - 600 Volts
Io : 4.0 Amperes

FEATURES :
* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Ideal for printed circuit board
* Very good heat dissipation
* Pb / RoHS Free

MECHANICAL DATA :
* Case : Reliable low cost construction utilizing molded plastic technique
* Epoxy : UL94V-O rate flame retardant
* Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Polarity symbols marked on case
* Mounting position : Any
* Weight : 4.28 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

<table>
<thead>
<tr>
<th>RATING</th>
<th>SYMBOL</th>
<th>RBV401</th>
<th>RBV402</th>
<th>RBV404</th>
<th>RBV406</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Recurrent Peak Reverse Voltage</td>
<td>VRMM</td>
<td>100</td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>V</td>
</tr>
<tr>
<td>Maximum Reverse Voltage</td>
<td>VR</td>
<td>100</td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>V</td>
</tr>
<tr>
<td>Maximum Average Forward Rectified Current Tc=50°C</td>
<td>IF(AV)</td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sinwave, Single Shot)</td>
<td>IFSM</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td>A</td>
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<tr>
<td>Maximum Forward Voltage per Diode at Ir = 2.0 A</td>
<td>VF</td>
<td>1.05</td>
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<td>1.1</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Maximum Reverse Current at Reverse Voltage</td>
<td>Ir</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>µA</td>
</tr>
<tr>
<td>Maximum Reverse Current at Reverse Voltage Ta = 100 °C</td>
<td>Ir(H)</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>µA</td>
</tr>
<tr>
<td>Thermal Resistance, Junction to Case</td>
<td>RθJC</td>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
<td>°C/W</td>
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<tr>
<td>Operating Junction Temperature Range</td>
<td>Tj</td>
<td>- 40 to + 150</td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>TSTRG</td>
<td>- 40 to + 150</td>
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<td></td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>
FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

- Average forward output current, amperes vs. ambient temperature (°C)

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

- Peak forward surge current vs. number of cycles at 60Hz

FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

- Forward current vs. forward voltage

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

- Reverse current vs. percent of rated reverse voltage

Note: Tj = 25°C, Tj = 50°C, Tj = 100°C