GLASS PASSIVATED BRIDGE RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 2.0 Amperes

Features
• Rating to 1000V PRV
• Ideal for printed circuit board
• Low forward voltage drop, high current capability.
• Reliable low cost construction utilizing molded epoxy technique results in inexpensive product

Mechanical Data
• Case: Molded plastic
• Polarity: As marked on Body
• Mounting position: Any

Absolute Maximum Ratings and Characteristics
Ratings at 25°C Ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

<table>
<thead>
<tr>
<th>Symbols</th>
<th>2W005G</th>
<th>2W01G</th>
<th>2W02G</th>
<th>2W04G</th>
<th>2W06G</th>
<th>2W08G</th>
<th>2W10G</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum recurrent peak reverse voltage</td>
<td>V_{RRM}</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>800</td>
<td>1000</td>
</tr>
<tr>
<td>Maximum RMS voltage</td>
<td>V_{RMS}</td>
<td>35</td>
<td>70</td>
<td>140</td>
<td>280</td>
<td>420</td>
<td>560</td>
<td>700</td>
</tr>
<tr>
<td>Maximum DC blocking voltage</td>
<td>V_{DC}</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>800</td>
<td>1000</td>
</tr>
<tr>
<td>Maximum average forward rectified current at T_a = 25°C</td>
<td>I_{AV}</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)</td>
<td>I_{FSM}</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Maximum forward voltage at 2.0A DC</td>
<td>V_F</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Maximum DC reverse current @ T_j = 25°C at rated DC blocking voltage @ T_j = 125°C</td>
<td>I_R</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>μA</td>
</tr>
<tr>
<td>Typical junction capacitance per element (Note 1)</td>
<td>C_J</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>Typical thermal resistance (Note 2)</td>
<td>R_{THJA}</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>°C/W</td>
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<tr>
<td>Operating temperature range</td>
<td>T_J</td>
<td>-55 to +150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>T_S</td>
<td>-55 to +150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

Notes:
(1) Measured at 1MHz and applied reverse voltage of 4V DC.
(2) Thermal resistance junction to ambient.
RATINGS AND CHARACTERISTIC CURVES (2W005G THRU 2W10G)

FIG. 1 - FORWARD CURRENT DERATING CURVE

- Average Forward Current (Amps)
- Ambient Temperature (°C)

FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

- Peak Forward Surge Current (Amps)
- Number of Cycles at 60Hz

FIG. 3 - TYPICAL JUNCTION CAPACITANCE

- Capacitance (pF)
- Reverse Voltage (Vols)

FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

- Instantaneous Forward Voltage (Volts)
- Instantaneous Forward Current (Amps)

FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

- Instantaneous Reverse Current (µA)
- Percent of Rated Peak Reverse Voltage (%)

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