Glass Passivated Junction Fast Switching Plastic Rectifier

**FEATURES**
- Superrectifier structure for high reliability condition
- Cavity-free glass-passivated junction
- Fast switching for high efficiency
- Low leakage current, typical $I_L$ less than 0.2 μA
- High forward surge capability
- Solder dip 275 °C max. 10 s, per JESD 22-B106

**TYPICAL APPLICATIONS**
High voltage rectification of G2 grid CRT and TV, snubber circuit of camera flash.

**MECHANICAL DATA**
- **Case:** DO-204AL, molded epoxy over glass body
- Molding compound meets UL 94 V-0 flammability rating Base P/N-E3 - RoHS-compliant, commercial grade
- **Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102
- **Polarity:** Color band denotes cathode end

**MAXIMUM RATINGS** ($T_A = 25 ^\circ C$ unless otherwise noted)

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>SYMBOL</th>
<th>( \text{RGP02-12E} )</th>
<th>( \text{RGP02-14E} )</th>
<th>( \text{RGP02-15E} )</th>
<th>( \text{RGP02-16E} )</th>
<th>( \text{RGP02-17E} )</th>
<th>( \text{RGP02-18E} )</th>
<th>( \text{RGP02-20E} )</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum repetitive peak reverse voltage</td>
<td>( V_{RMM} )</td>
<td>1200</td>
<td>1400</td>
<td>1500</td>
<td>1600</td>
<td>1700</td>
<td>1800</td>
<td>2000</td>
<td>V</td>
</tr>
<tr>
<td>Maximum RMS voltage</td>
<td>( V_{RMS} )</td>
<td>840</td>
<td>980</td>
<td>1050</td>
<td>1120</td>
<td>1190</td>
<td>1260</td>
<td>1400</td>
<td>V</td>
</tr>
<tr>
<td>Maximum DC blocking voltage</td>
<td>( V_{DC} )</td>
<td>1200</td>
<td>1400</td>
<td>1500</td>
<td>1600</td>
<td>1700</td>
<td>1800</td>
<td>2000</td>
<td>V</td>
</tr>
<tr>
<td>Maximum average forward rectified current 0.375&quot; (9.5 mm) lead length at ( T_A = 55 ^\circ C )</td>
<td>( I_{F(AV)} )</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Peak forward surge current 8.3 ms single half sine-wave superimposed on rated</td>
<td>( I_{FSM} )</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Operating junction and storage temperature range</td>
<td>( T_J, T_{STG} )</td>
<td>-65 to +175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>
Note

(1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length, PCB mounted
Fig. 3 - Typical Instantaneous Forward Characteristics

Fig. 4 - Typical Reverse Characteristics

Fig. 5 - Typical Junction Capacitance

**PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

**DO-204AL (DO-41)**

- Minimum dimensions:
  - 1.0 (25.4)
  - 0.080 (2.0) DIA.
  - 0.205 (5.2)
  - 0.160 (4.1)
  - 0.107 (2.7)
  - 0.026 (0.66)
  - 0.033 (0.83) DIA.

- Maximum dimensions:
  - 1.0 (25.4) MIN.
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