1.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- SMA Weight: 0.064 grams (approx.)
- SMB Weight: 0.093 grams (approx.)
- Marking: Type Number

Maximum Ratings and Electrical Characteristics  $T_a = 25^\circ C$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Symbol</th>
<th>SMA</th>
<th>SMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage</td>
<td>$V_{RRM}$ $V_{RW}$ $V_R$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMS Reverse Voltage</td>
<td>$V_{R(RMS)}$</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>Average Rectified Output Current $\theta T = 100^\circ C$</td>
<td>$I_O$</td>
<td>1.0</td>
<td>A</td>
</tr>
<tr>
<td>Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)</td>
<td>$I_{FSM}$</td>
<td>30</td>
<td>A</td>
</tr>
<tr>
<td>Forward Voltage $\theta I_F = 1.0A$</td>
<td>$V_{FM}$</td>
<td>1.1</td>
<td>V</td>
</tr>
<tr>
<td>Peak Reverse Leakage Current at Rated DC Blocking Voltage $\theta T_A = 25^\circ C$</td>
<td>$I_{RM}$</td>
<td>5.0</td>
<td>μA</td>
</tr>
<tr>
<td>Typical Junction Capacitance (Note 2)</td>
<td>$C_J$</td>
<td>10</td>
<td>pF</td>
</tr>
<tr>
<td>Typical Thermal Resistance, Junction to Terminal</td>
<td>$R_{nJT}$</td>
<td>30</td>
<td>°C/W</td>
</tr>
<tr>
<td>Operating and Storage Temperature Range</td>
<td>$T_J, T_{STG}$</td>
<td>-65 to +150</td>
<td>°C</td>
</tr>
</tbody>
</table>

Notes:
1. Valid provided that terminals are kept at ambient temperature.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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A, B, D, G, J, K, M Suffix Designates SMA Package
AB, BB, DB, GB, JB, KB, MB Suffix Designates SMB Package

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Fig. 1 Forward Current Derating Curve

Fig. 2 Typical Forward Characteristics

Fig. 3 Typical Forward Characteristics

Fig. 4 Typical Reverse Characteristics