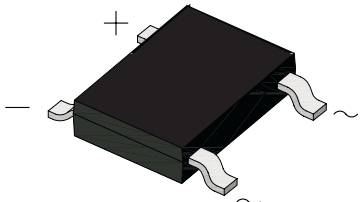
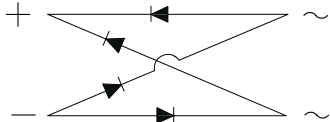


**0.8 Amp. Miniature Single Phase Glass Passivated Surface Mount Bridge Rectifier**

|                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>TO-269AA / MBS</b></p>   | <p><b>Voltage</b><br/>600 V to 1000 V</p> <p><b>Current</b><br/>0.8 A</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                  | <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Saves space on printed circuit boards</li> <li>• Ideal for automated placement</li> <li>• High surge current capability</li> <li>• Solder dip 260°C, 10s</li> <li>• Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC</li> <li>• Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> <li>• Halogen-free available according to IEC 61249-2-21 definition</li> </ul> <p>  <b>RoHS COMPLIANT</b><br/><b>HALOGEN FREE</b></p> |
|                                                                                                                                                                                                  | <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• <b>Case:</b> TO-269AA/MBS. Epoxy meets UL 94V-0 flammability rating.</li> <li>• <b>Polarity:</b> As marked on body.</li> <li>• <b>Terminals:</b> Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.</li> </ul> <p><b>TYPICAL APPLICATIONS</b><br/>Used in general purpose ac-to-dc bridge full wave rectification for power supply, lighting ballaster, Battery charger, home appliances, office equipment, and terlecommunication applications.</p>                                                                  |

**Maximun Ratings and Electrical Characteristics at 25°C**

|                                  |                                                                                             | <b>1SMZG06GP</b> | <b>1SMZG10GP</b> |
|----------------------------------|---------------------------------------------------------------------------------------------|------------------|------------------|
| <b>Marking Code</b>              |                                                                                             | <b>Z6</b>        | <b>Z10</b>       |
| <b>Halogen Free Marking Code</b> |                                                                                             | <b>Z7</b>        | <b>Z14</b>       |
| $V_{RRM}$                        | Peak Recurrent Reverse Voltage (V)                                                          | 600              | 1000             |
| $V_{RMS}$                        | Maximum RMS Voltage (V)                                                                     | 420              | 700              |
| $I_{F(AV)}$                      | Maximum Average Forward Rectified Current<br>On Glass-epoxy P.C.B.<br>On Aluminum Substrate | 0.5 A<br>0.8 A   |                  |
| $I_{FSM}$                        | 8.3 ms. Peak Forward Surge                                                                  | 35 A             |                  |
| $T_j$                            | Operating Temperature Range                                                                 | -40 to +150 °C   |                  |
| $T_{stg}$                        | Storage Temperature Range                                                                   | -40 to +150 °C   |                  |

**Electrical Characteristics at Tamb = 25 °C**

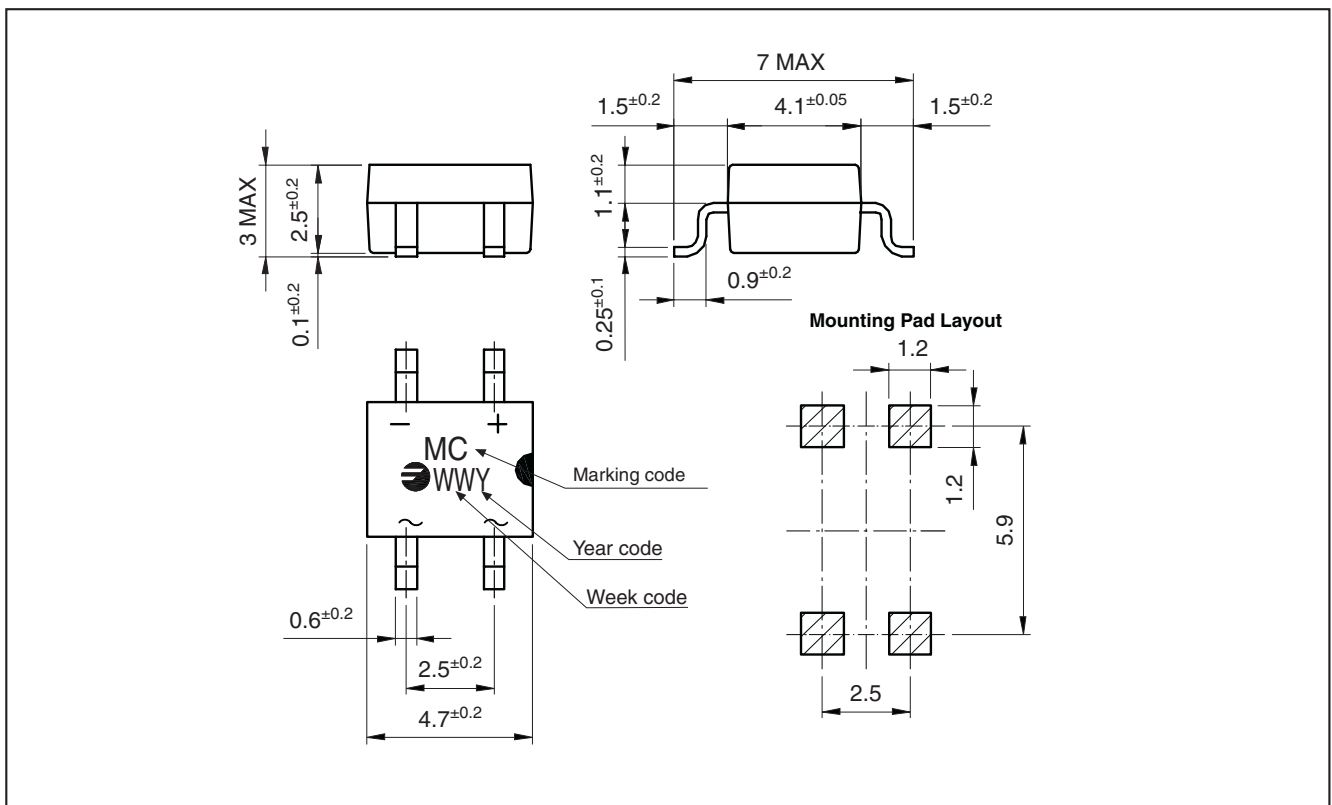
|       |                                                                                     |                  |
|-------|-------------------------------------------------------------------------------------|------------------|
| $V_F$ | Maximun Instantaneous Forward Voltage @ 0.8 A                                       | 1.15 V           |
| $I_R$ | Maximum DC Reverse Current @TA = 25 °C<br>at Rated DC Blocking Voltage @TA = 125 °C | 5.0 µA<br>100 µA |

## 0.8 Amp. Miniature Single Phase Glass Passivated Surface Mount Bridge Rectifier

### Ordering information

| PREFERRED P/N   | PACKAGE CODE | DELIVERY MODE              | BASE QUANTITY | UNIT WEIGHT (g) |
|-----------------|--------------|----------------------------|---------------|-----------------|
| 1SMZG06GP TR    | TR           | 13" diameter tape and reel | 3,000         | 0.22            |
| 1SMZG06GP HF TR | TR           | 13" diameter tape and reel | 3,000         | 0.22            |

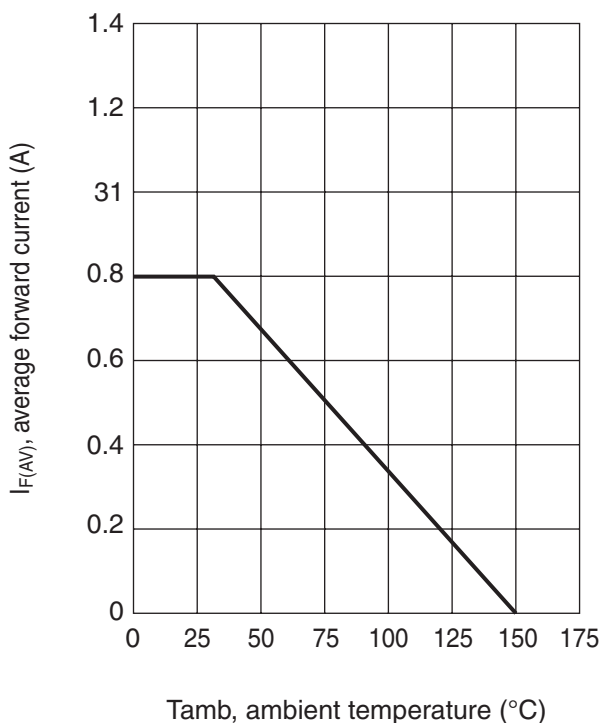
### Package Outline Dimensions: (mm) TO-269AA / MBS



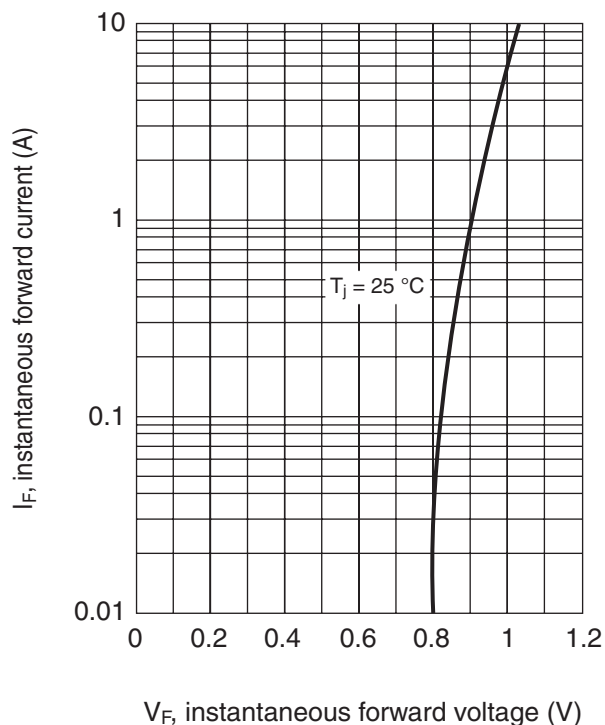
### 0.8 Amp. Miniature Single Phase Glass Passivated Surface Mount Bridge Rectifier

#### Ratings and Characteristics (Ta 25 °C unless otherwise noted)

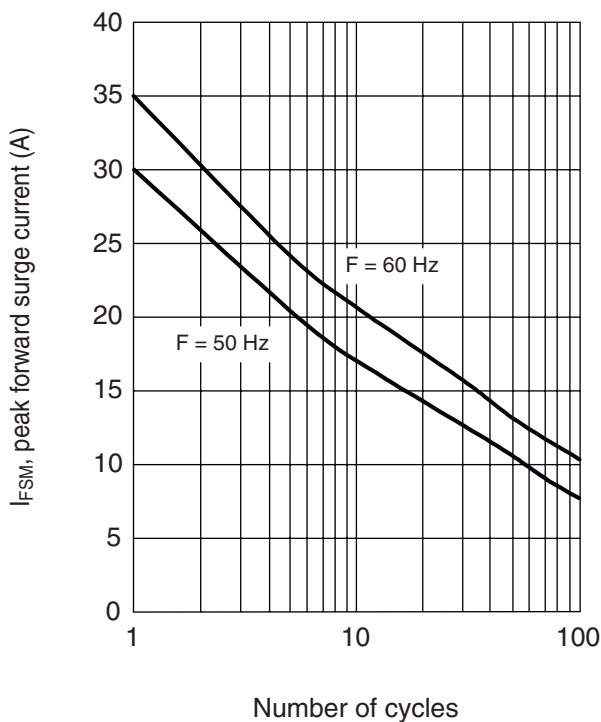
FORWARD CURRENT DERATING CURVE



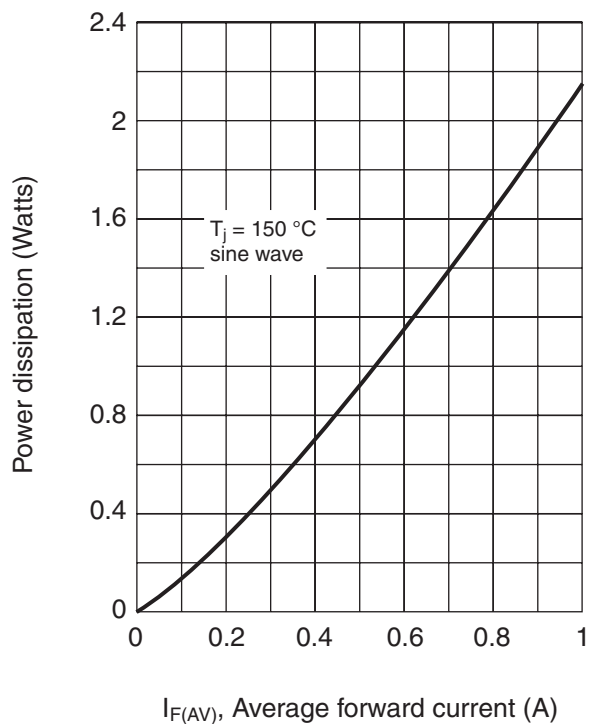
TYPICAL FORWARD CHARACTERISTICS



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG



POWER DISSIPATION CURVE



**0.8 Amp. Miniature Single Phase Glass Passivated Surface Mount Bridge Rectifier**

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