

Surface Mount Glass Passivated Rectifier Reverse Voltage 50~1000V Forward Current 1A

Features

- · Glass passivated standard rectifiers
- · Ideal for automated placement
- · Low forward voltage drop
- · Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile, typical thickness 1.0mm
- AEC-Q101 qualified

Typical Applications





eSGB (SMAF)

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies, and other consumer applications.

| Maximum Ratings (TA = 25 °C unless otherwise noted) | | | | | | | | | |
|--|----------|---------------|-----|-----|-----|-----|-----|------|------|
| Parameter | Symbol | L1A | L2A | L3A | L4A | L5A | L6A | L7A | Unit |
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current at TL | IF(AV) | 1.0 | | | | Α | | | |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | IFSM | 30 | | | | | А | | |
| Operating junction and storage temperature range | TJ, TSTG | - 55 to + 150 | | | | | °C | | |

| Electrical Characteristics (TA = 25 °C unless otherwise noted) | | | | | | | | | | |
|--|--|-----------------|-----|-----|-----|-----|-----|------|-----|-------|
| Parameter | Test Conditions | Symbol | L1A | L2A | L3A | L4A | L5A | L6A | L7A | Unit |
| Maximum instantaneous forward | 1 A | VF | 1.1 | | | | | | | Volts |
| Maximum DC reverse | TA=25℃ | IR | 5 | | | | | | | |
| current at rated DC blocking voltage | TA=125℃ | IK. | 50 | | | | | | | |
| Typical reverse recovery time | I _F =0.5A,I _R =1.0A, | 4 | 1.8 | | | | | | | |
| | I _{rr} =0.25A | t _{rr} | | | | | | | | |
| Typical junction capacitance | 4.0 V, 1 MHz | CJ | 6 | | | | | pF | | |
| Typical thermal resistance ¹⁾ | juntion to mount | $R_{\theta JM}$ | 10 | | | | | °C/W | | |

Note:1),The thermal resistance from junction to mount,mounted on P.C.B with 8x8mm copper pads,2 OZ,FR4 PCB

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Ratings and Characteristics Curves

 $(TA = 25^{\circ}C \text{ unless otherwise noted})$

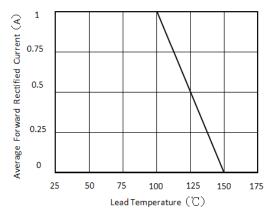


Figure 1. Forward Current Derating Curve

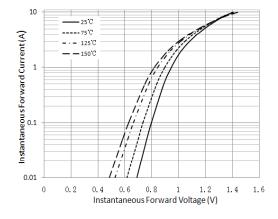


Figure 3. Typical Instantaneous Forward Characteristics

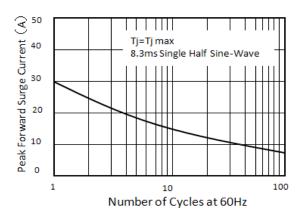


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

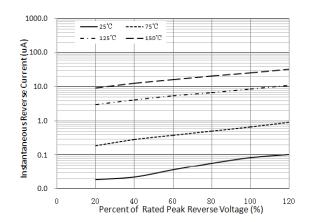
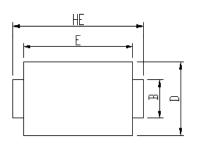


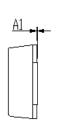
Figure 4. Typical Reverse Characteristics

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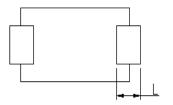
Package Outline Dimensions

in inches (millimeters)



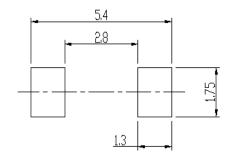






| DIM | Unit | mm | Unit: inch | | |
|-----|------|------|------------|-------|--|
| | MIN | MAX | MIN | MAX | |
| Α | 0.92 | 1.08 | 0.036 | 0.043 | |
| A1 | 0 | 0.1 | 0.000 | 0.004 | |
| В | 1.25 | 1.45 | 0.049 | 0.057 | |
| С | 0.1 | 0.25 | 0.004 | 0.010 | |
| D | 2.6 | 2.8 | 0.102 | 0.110 | |
| Е | 4.1 | 4.3 | 0.161 | 0.169 | |
| L | 0.7 | 1.1 | 0.028 | 0.043 | |
| HE | 4.8 | 5.2 | 0.189 | 0.205 | |

Soldering footprint

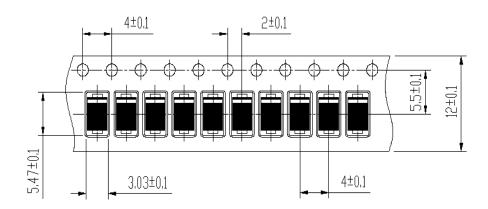


Packing Information

Packing quantities:

10,000 pcs/Reel, 12mm Tape, 13" Reel

Tape & Reel Specification





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