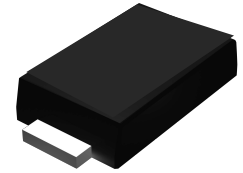


Features

- Glass passivated Superfast Recovery rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- Low profile, typical thickness 1.0mm



Package: eSGB (SMAF)

Maximum Ratings (TA = 25 °C unless otherwise noted)

| Parameter | Symbol | LU1 | LU2 | LU3 | LU4 | LU5 | Unit |
|--|----------------|---------------|-----|-----|-----|-----|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 1.0 | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load | I_{FSM} | 30 | | | | | A |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | - 55 to + 150 | | | | | °C |

Electrical Characteristics (TA = 25 °C unless otherwise noted)

| Parameter | Test Conditions | Symbol | LU1 | LU2 | LU3 | LU4 | LU5 | Unit |
|---|------------------------------------|-----------------|-----|-----|-----|-----|-----|---------|
| Maximum Instantaneous Forward Voltage | 1 A | V_F | 1.0 | | | 1.3 | 1.7 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_A=25^{\circ}C$ | I_R | 5 | | | | | μA |
| | $T_A=125^{\circ}C$ | | 50 | | | | | |
| Typical Reverse Recovery Time | $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$ | t_{rr} | 35 | | | | | nS |
| Typical Junction Capacitance | 4.0 V, 1 MHz | C_J | 10 | | | | | pF |
| Typical Thermal Resistance ¹⁾ | Junction to Ambient | $R_{\theta JA}$ | 66 | | | | | °C/W |
| | Junction to Case | $R_{\theta JC}$ | 32 | | | | | |
| | Junction to mount | $R_{\theta JM}$ | 1 | | | | | |

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

Ratings and Characteristics Curves

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

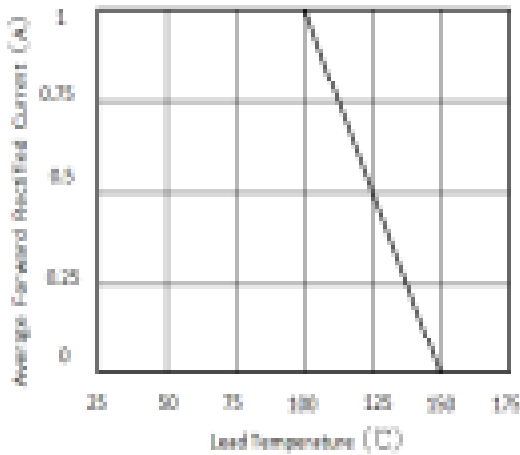


Figure 1. Forward Current Derating Curve

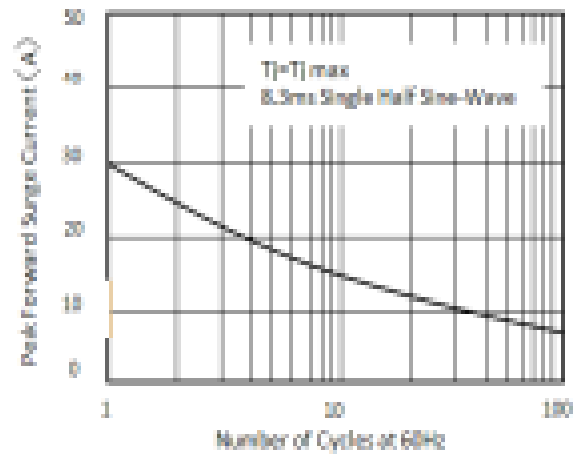


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

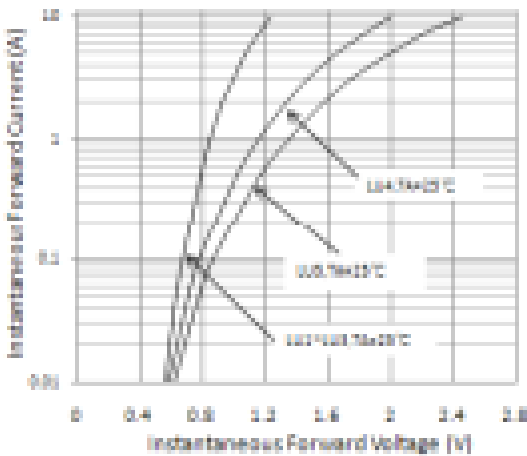


Figure 3. Typical Instantaneous Forward Characteristics

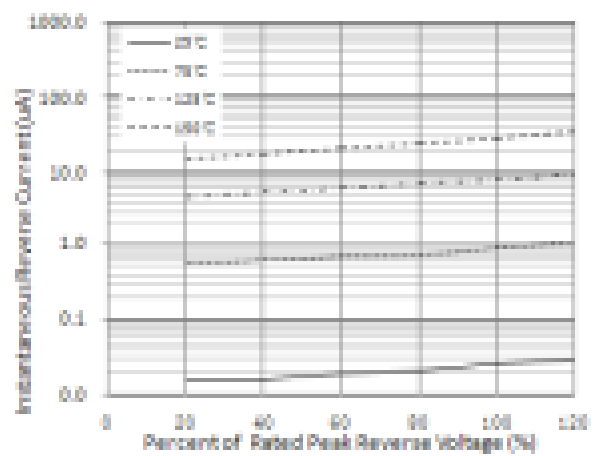
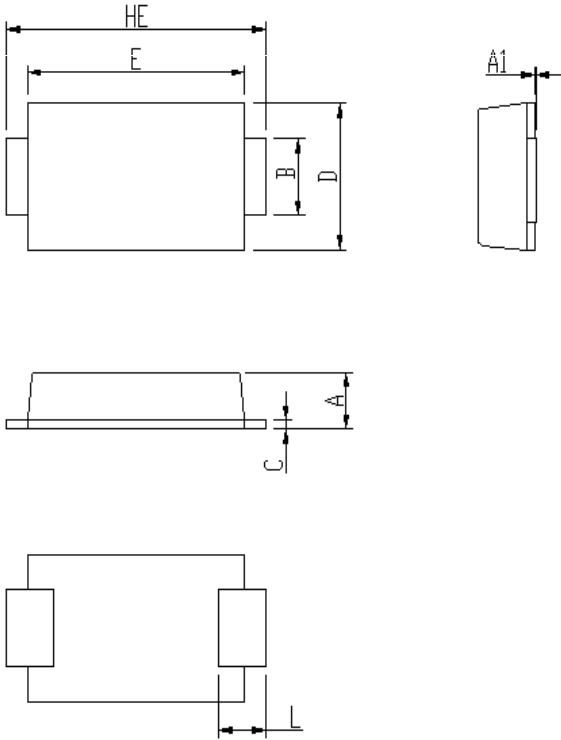


Figure 4. Typical Reverse Characteristics

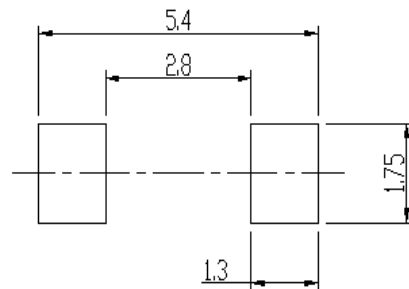
Package Outline Dimensions

in inches (millimeters)



| DIM | Unit: mm | | Unit: inch | |
|-----|----------|------|------------|-------|
| | MIN | MAX | MIN | MAX |
| A | 0.92 | 1.08 | 0.036 | 0.043 |
| A1 | 0 | 0.1 | 0.000 | 0.004 |
| B | 1.25 | 1.45 | 0.049 | 0.057 |
| C | 0.1 | 0.25 | 0.004 | 0.010 |
| D | 2.6 | 2.8 | 0.102 | 0.110 |
| E | 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

