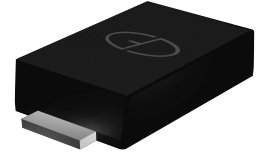


Features

- Low V_F schottky barrier rectifier
- Low profile - typical height 1.0 mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



Package: eSGA
(SOD-123FL)

Applications

For use in fast switching in RF module, lighting, cell phone, portable devices, power supply and other consumer applications.

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

| Parameter | Symbol | FS2BH | Unit |
|--|-------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | V |
| Maximum RMS Voltage | V_{RMS} | 70 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 2.0 | A |
| Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load) | I_{FSM} | 50 | A |
| Operation Junction Temperature Range | T_J | 150 | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | °C |

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

| Parameter | Test Conditions | Symbol | FS2BH | Unit |
|---|-------------------------|-----------------|-------|---------------|
| Maximum Instantaneous Forward Voltage | $I_F=2A$ | V_F | 0.85 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_A=25^\circ\text{C}$ | I_R | 200 | μA |
| | $T_A=125^\circ\text{C}$ | | 30 | mA |
| Typical Junction Capacitance | 4.0 V, 1 MHz | C_J | 71 | pF |
| Typical Thermal Resistance ¹⁾ | Junction to Ambient | $R_{\theta JA}$ | 95 | °C/W |
| | Junction to Mount | $R_{\theta JM}$ | 35 | |

Note:1) The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 5×5mm copper pads, 2 OZ, FR4 PCB

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

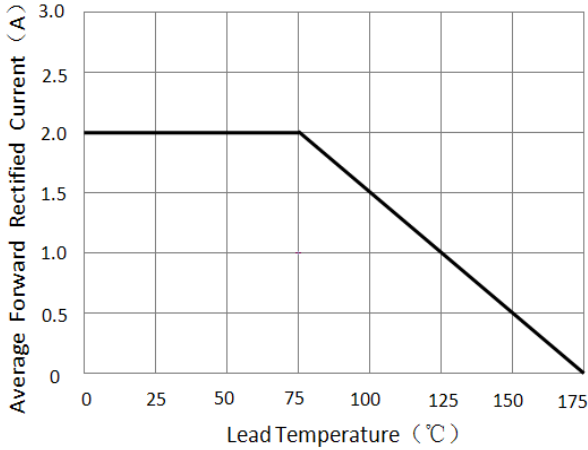


Figure 1. Forward Current Derating Curve

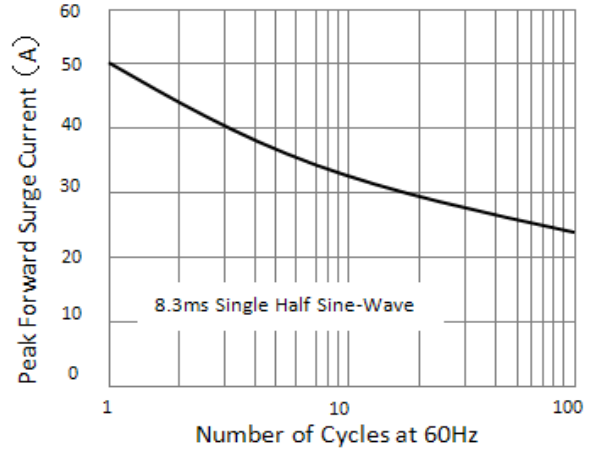


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

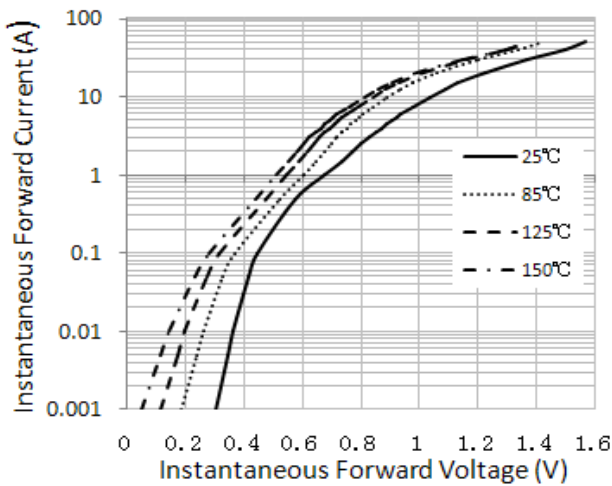


Figure 3. Typical Instantaneous Forward Characteristics

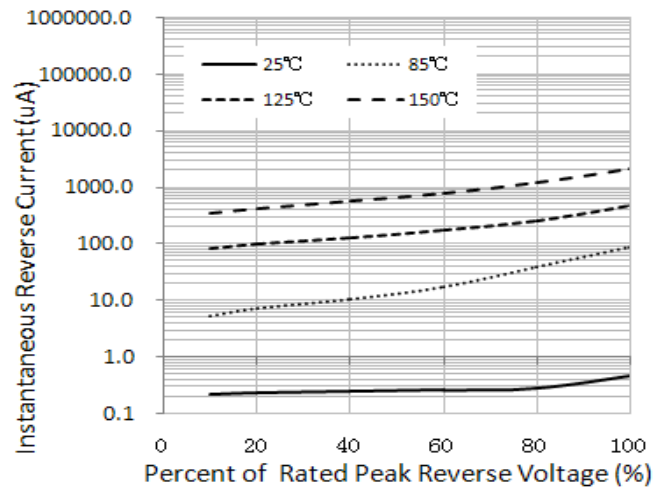


Figure 4. Typical Reverse Characteristics

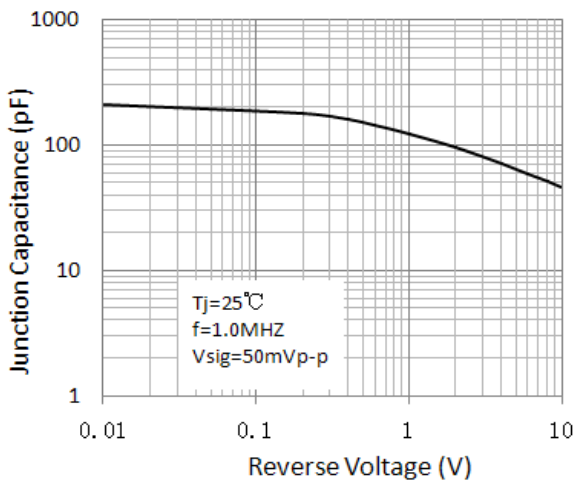
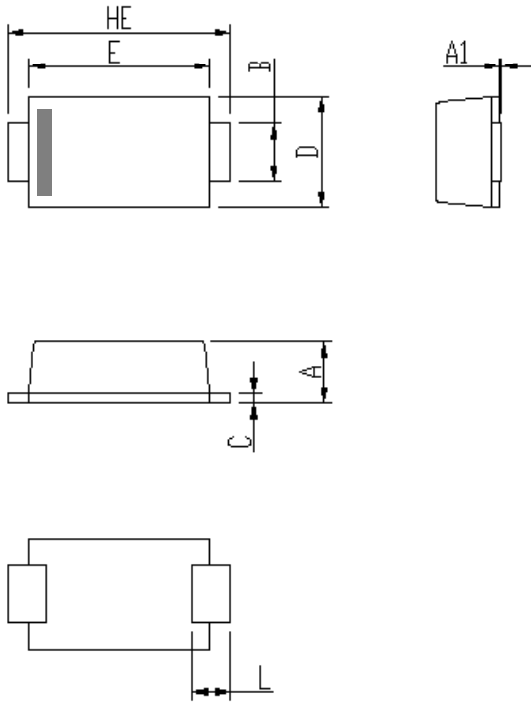


Figure 5. Typical Junction Capacitance

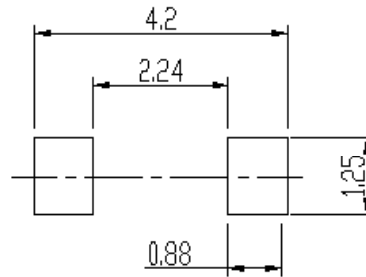
Package Outline Dimensions

eSGA (SOD-123FL)



| DIM | Unit: mm | | Unit: inch | |
|-----|----------|------|------------|-------|
| | MIN | MAX | MIN | MAX |
| A | 0.9 | 1.08 | 0.035 | 0.043 |
| A1 | 0 | 0.1 | 0.000 | 0.004 |
| B | 0.85 | 1.05 | 0.033 | 0.041 |
| C | 0.1 | 0.25 | 0.004 | 0.010 |
| D | 1.7 | 2 | 0.067 | 0.079 |
| E | 2.9 | 3.1 | 0.114 | 0.122 |
| L | 0.43 | 0.83 | 0.017 | 0.033 |
| HE | 3.5 | 3.9 | 0.138 | 0.154 |

Soldering footprint



Packing Information

Packing quantities

3000 pcs/Reel, 40 Reels/Box; 8mm Tape, 7" Reel

Tape & Reel Specification

