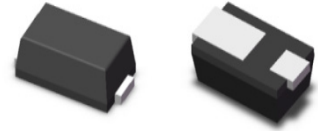


Features

- Low profile-typical height of 0.65mm
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



iSGP
 (SOD-323 HS)

Applications

For use of fast switching in RF module, lighting, cellular phone, portable device, power supplies and other consumer applications.



Maximum Ratings (T_A=25°C unless otherwise specified)

| Parameter | Symbol | Typ. | Unit |
|---|-----------------------------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RMM} | 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)} | 1.0 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load | I _{FSM} | 25 | A |
| Typical Thermal Resistance Junction to Ambient | R _{θJA} | 82 | °C/W |
| Typical Thermal Resistance Junction to Lead | R _{θJL} | 6 | °C/W |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 To +150 | °C |

Electrical Characteristics (T_A=25°C unless otherwise specified)

| Parameter | Symbol | Conditions | Max. | Unit |
|---|----------------|--|------|------|
| Maximum Instantaneous Forward Voltage | V _F | I _F =1A, T _A =25°C | 0.8 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | T _A =25°C | 20 | μA |
| Typical Junction Capacitance | C _J | 4.0V, 1MHz | 28 | pF |

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

Typical Electrical and Thermal Characteristic Curves

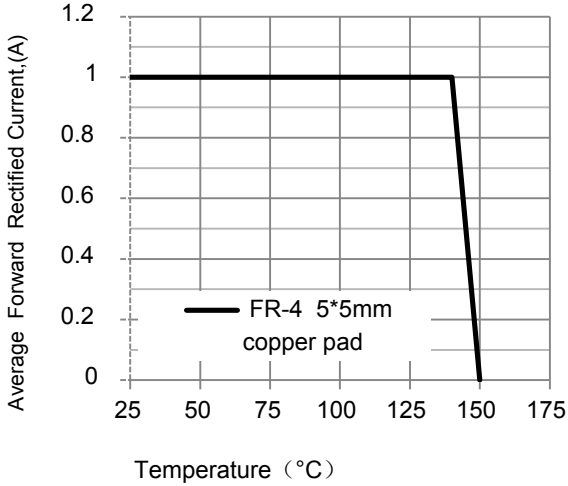


Figure 1. Forward Current Derating Curve

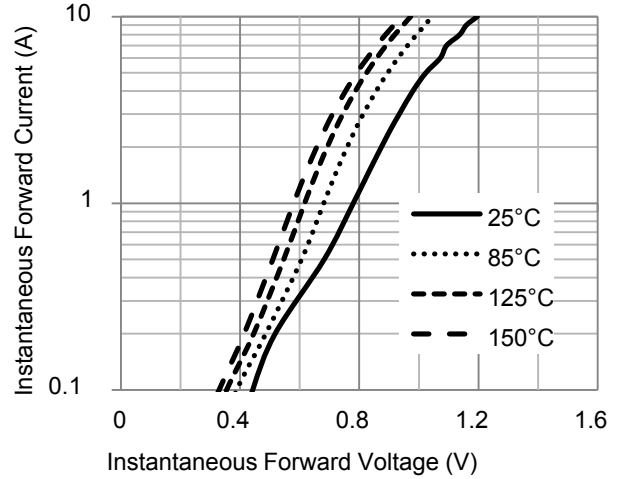


Figure 2. Typical Instantaneous Forward Characteristics

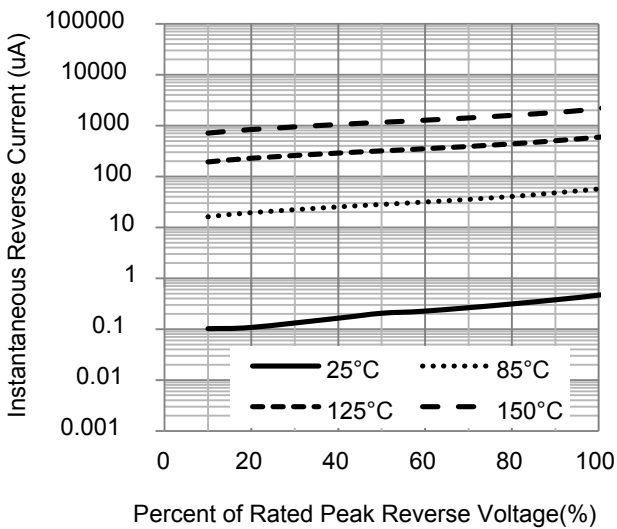


Figure 3. Typical Reverse Characteristics

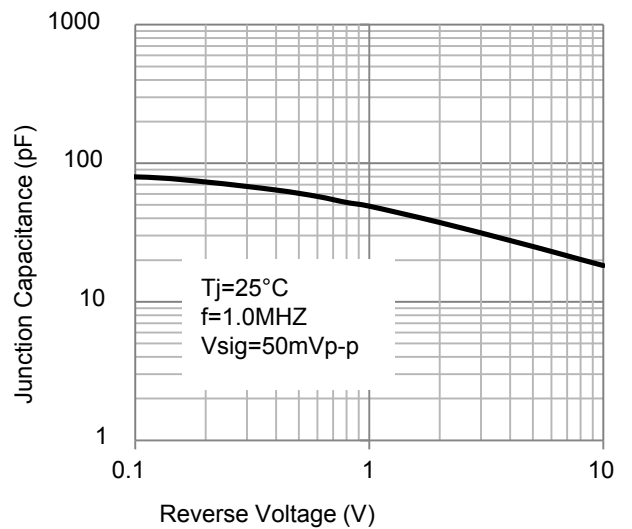


Figure 4. Typical Junction Capacitance

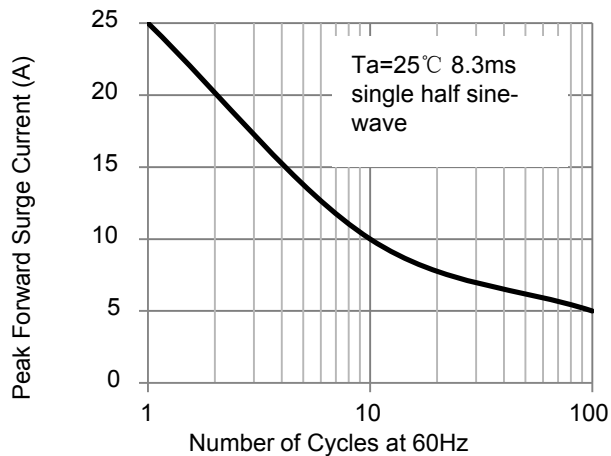
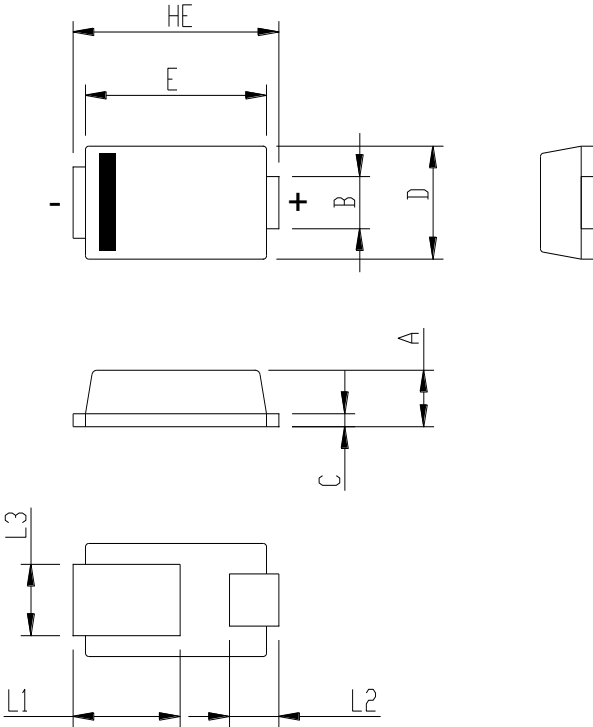


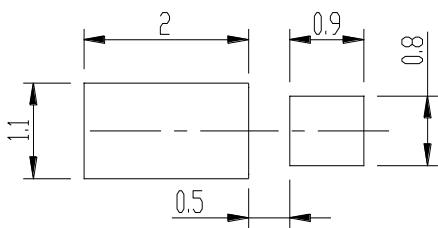
Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

Package Outline Dimensions iSGP (SOD-323 HS)



| Package | Unit:mm | |
|---------|---------|------|
| | MIN | MAX |
| iSGP | | |
| A | 0.60 | 0.73 |
| B | 0.55 | 0.75 |
| C | 0.10 | 0.25 |
| D | 1.20 | 1.40 |
| E | 2.10 | 2.30 |
| HE | 2.30 | 2.70 |
| L1 | 1.10 | 1.50 |
| L2 | 0.40 | 0.75 |
| L3 | 0.75 | 1.00 |

Recommended Pad Layout



Unit: mm