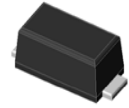


Features

- 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
- Halogen-free according to IEC 61249-2-21 definition



Package: eSGP
(SOD-323F)

Applications

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

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	V
Maximum RMS Voltage	V _{RMS}	14	V
Maximum DC Blocking Voltage	V _{DC}	20	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}	25	A
Operation Junction Temperature Range	T _J	- 55 to + 150	°C
Storage Temperature Range	T _{STG}	- 55 to + 150	°C

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

Parameter	Test Conditions	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage	I _F =1A	V _F	0.45	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	0.1	mA
	T _A =125°C		30	
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	60	pF
Typical Thermal Resistance ¹⁾	Junction to Mount	R _{θJM}	40	°C/W

Note:1) The thermal resistance from junction to 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)

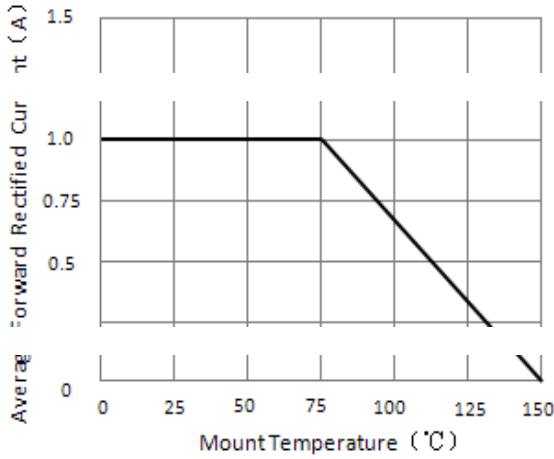


Figure 1. Forward Current Derating Curve

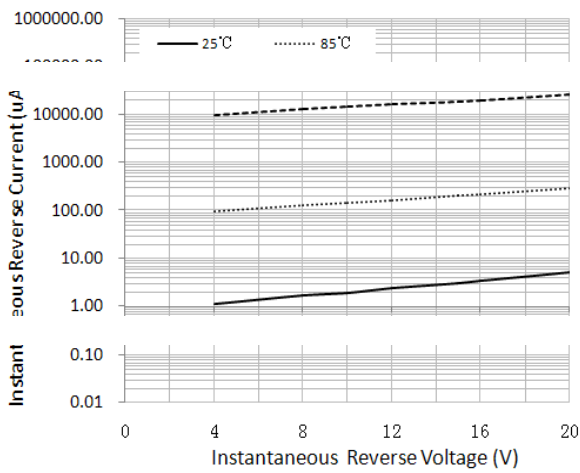


Figure 3. Typical Reverse Characteristics

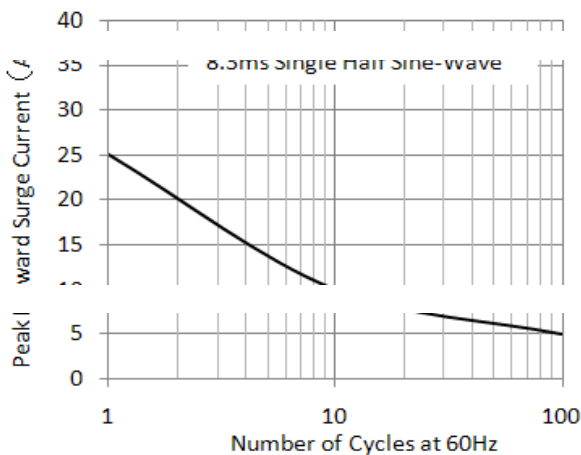


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

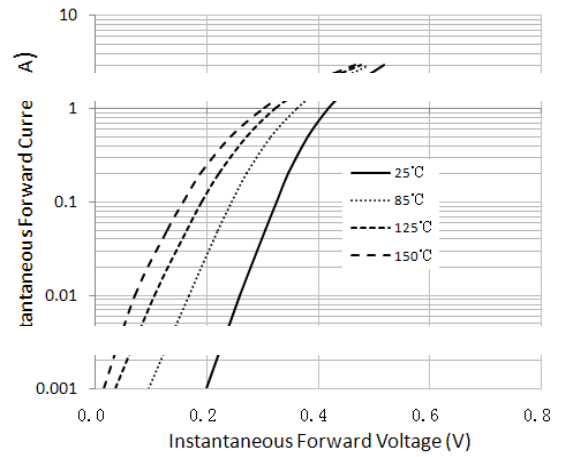


Figure 2. Typical Instantaneous Forward Characteristics

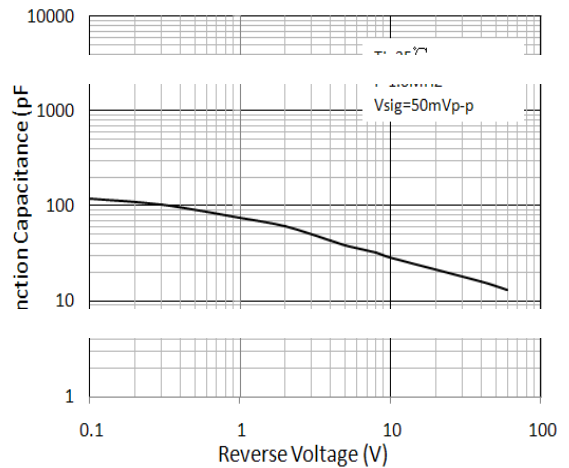
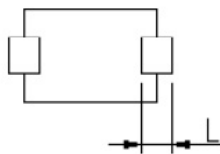
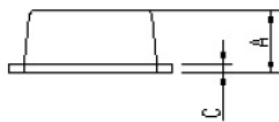
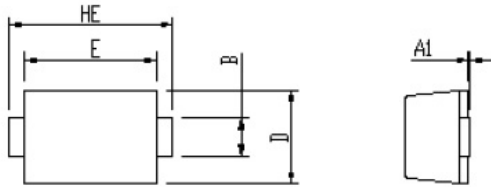


Figure 4. Typical Junction Capacitance

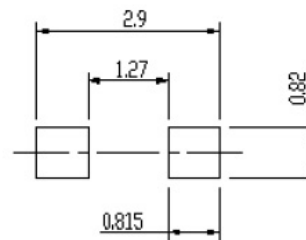
Package Outline Dimensions

eSGP (SOD-323F)



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	0.5	0.7	0.020	0.028
C	0.1	0.25	0.004	0.010
D	1.4	1.6	0.055	0.063
E	2	2.2	0.079	0.087
L	0.35	0.65	0.014	0.026
HE	2.4	2.8	0.094	0.110

Soldering footprint



Packing Information Packing quantities

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

Tape & Reel Specification

