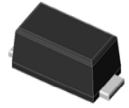


SGP0120SL1 thru SGP0140SL1

Surface Mount Schottky Rectifier
 Reverse Voltage 20-40V Forward Current 1A

Features

- Low VF Schottky barrier diodes
- Low profile - typical height of 1.0 mm
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



Package: eSGP
(SOD-323F)



RoHS
COMPLIANT

Applications

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

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

Parameter	Symbol	SGP0120SL1	SGP0130SL1	SGP0140SL1	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	V
Maximum RMS Voltage	V _{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1			A
Peak Forward Surge Current(8.3ms single half sine-wave superimposed on rated load)	I _{FSM}	9			A
Operating Junction Temperature	T _J	-55 To +150			°C
Storage Temperature	T _{STG}	-55 To +150			°C

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

Parameter	Symbol	Conditions	SGP0120SL1	SGP0130SL1	SGP0140SL1	Unit
Maximum Instantaneous Forward Voltage	V _F	I _F =1A, T _A =25°C	0.5			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _A =25°C	200			μA
Typical Junction Capacitance	C _J	4.0V, 1MHz	61			pF
Typical Thermal Resistance	R _{θJM}	Junction to Mount	55			°C/W

Note1: 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)

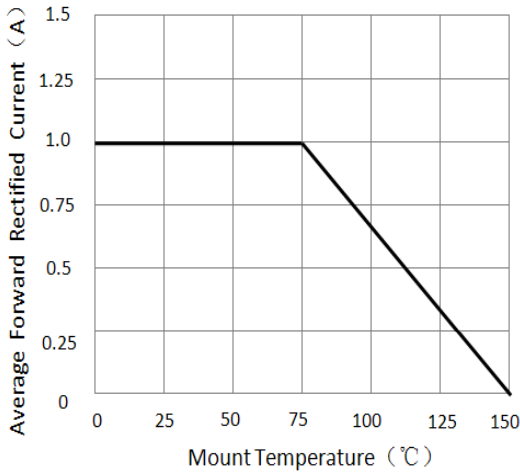


Figure 1. Forward Current Derating Curve

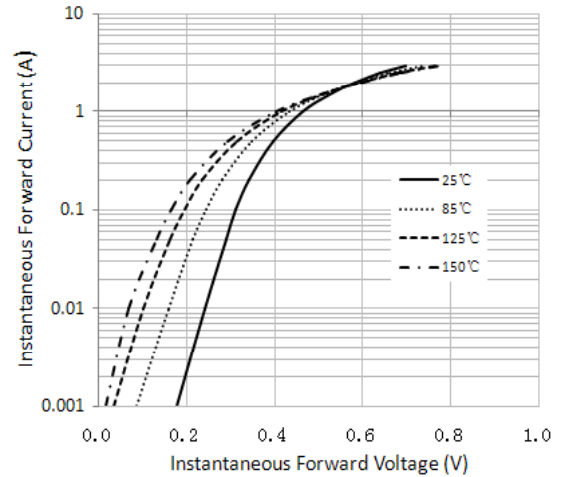


Figure 2. Typical Instantaneous Forward Characteristics

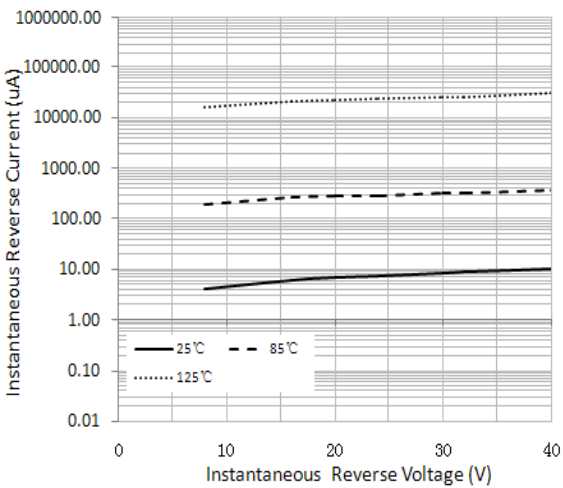


Figure 3. Typical Reverse Characteristics

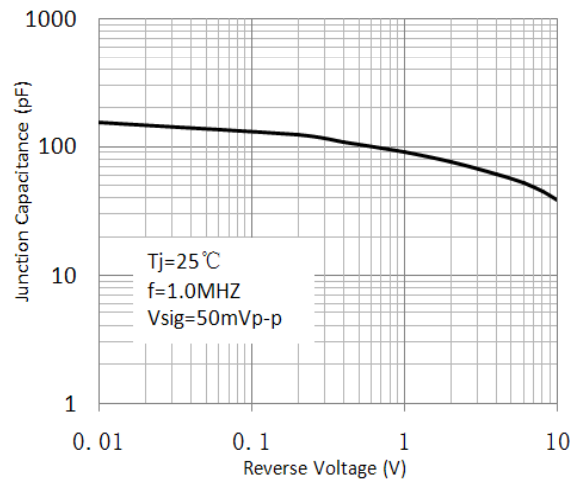


Figure 4. Typical Junction Capacitance

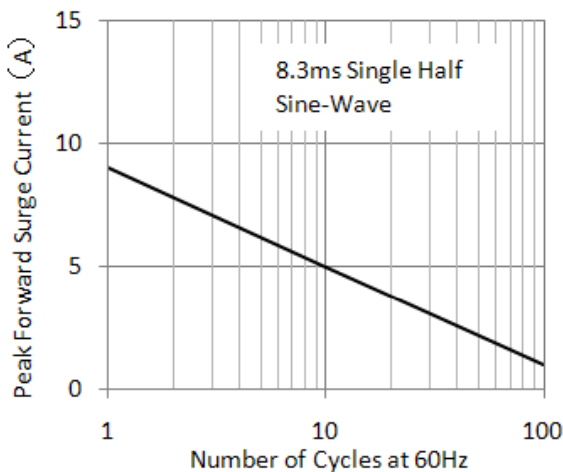


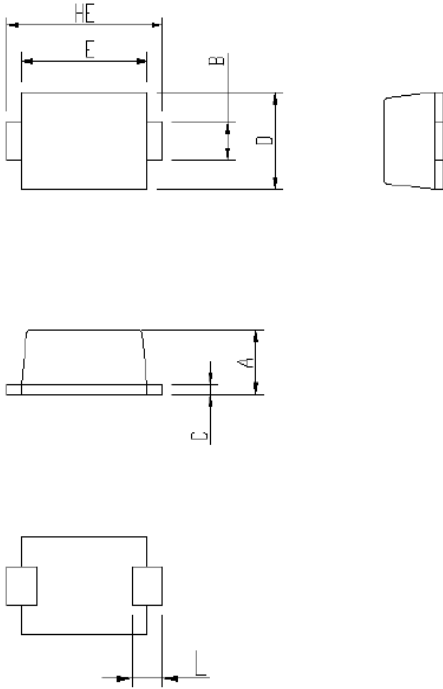
Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

SGP0120SL1 thru SGP0140SL1

Surface Mount Schottky Rectifier
 Reverse Voltage 20-40V Forward Current 1A

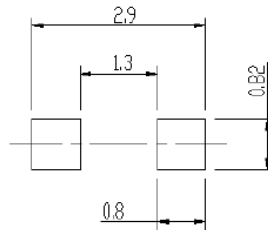
Package Outline Dimensions

eSGP (SOD-323F)



Package	Unit in MM		Unit in Inch	
	MIN	MAX	MIN	MAX
A	0.90	1.08	0.035	0.043
B	0.50	0.70	0.020	0.028
C	0.10	0.25	0.004	0.010
D	1.40	1.60	0.055	0.063
E	2.00	2.20	0.079	0.087
L	0.35	0.65	0.014	0.026
HE	2.40	2.80	0.094	0.110

Recommended Pad Layout (Unit in MM)



Packing Information Packing quantities

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

Tape & Reel Specification

