

Surface Mount Schottky Rectifier Reverse Voltage 30~40V Forward Current 2A

#### **Features**

- Low VF Schottky barrier diodes
- Very 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





eSGP(SOD-323F)

### **Typical Applications**

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

Maximum Ratings (TA = 25 °C unless otherwise noted)								
Parameter	Symbol	SGP0230SD	SGP0240SD	Unit				
Maximum repetitive peak reverse voltage	VRRM	30	40	V				
Maximum RMS voltage	VRMS	21	28	V				
Maximum DC blocking voltage	VDC	30	40	V				
Maximum average forward rectified current	IF(AV)	2.0		Α				
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	40		А				
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150		°C				

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	SGP0230SD	SGP0240SD	Unit			
Torward voltage	IF=2A,TA=25℃	$V_{F}$	0.55		Volts			
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	I <sub>R</sub>	0.1		mA			
Typical junction capacitance	4.0 V, 1 MHz	CJ	120		pF			
Typical thermal resistance	juntion to mount	$R_{\theta JM}$	60		°C/W			

Note:1),The thermal resistance from junction to mount,mounted on P.C.B with 5x5mm copper pads,2 OZ,FR4 PCB



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#### Ratings and Characteristics Curves

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

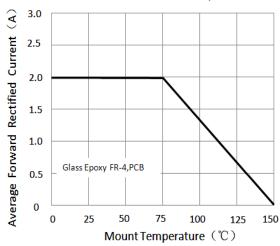


Figure 1. Forward Current Derating Curve

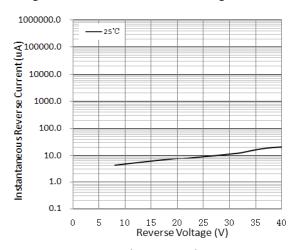


Figure 3. Typical Reverse Characteristics

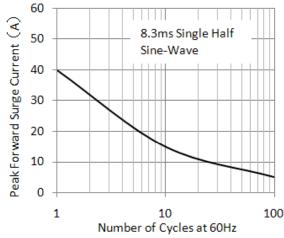


Figure 5.Maximum Non-Repetitive Peak Forward Surge Current

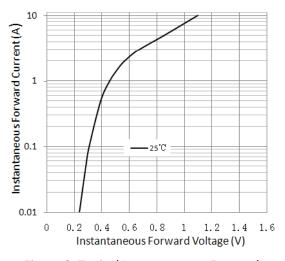


Figure 2. Typical Instantaneous Forward Characteristics

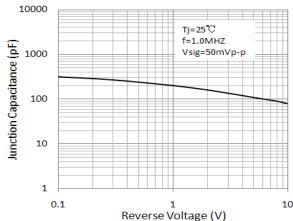
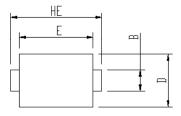


Figure 4. Typical Junction Capacitance

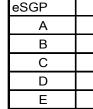


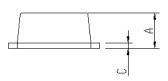
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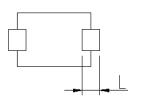
# **Package Outline Dimensions**





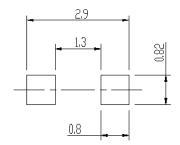






Package	Unit:mm		Unit:inch		
eSGP	MIN	MAX	MIN	MAX	
Α	0.9	1.08	0.035	0.043	
В	0.5	0.7	0.020	0.028	
С	0.1	0.25	0.004	0.010	
D	1.4	1.6	0.055	0.063	
Е	2.0	2.2	0.079	0.087	
L	0.35	0.65	0.014	0.026	
HE	2.4	2.8	0.094	0.110	

Soldering footprint

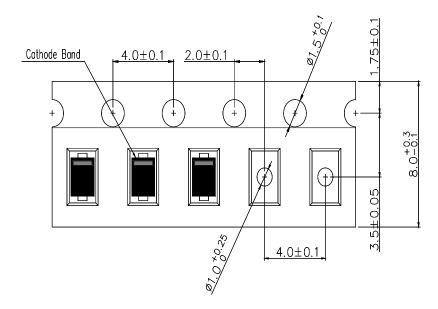


#### **Packing Information**

#### Packing quantities:

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

**Tape & Reel Specification** 





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