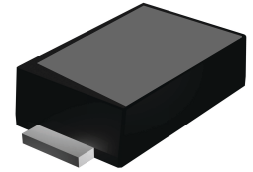


Features

- Low forward voltage drop
- Low leakage current
- Glass passivated Standard Rectifier
- Low profile - typical height of 1.0 mm
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition


 Package: eSGP
 (SOD-323F)

RoHS
 COMPLIANT

Typical Applications

For use of general purpose rectification in lighting, cellular phones, portable devices, power supplies and other consumer applications.

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

Parameter	Symbol	SPP1A	SPP2A	SPP3A	SPP4A	SPP5A	SPP6A	SPP7A	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at TL (See Fig.1)	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
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150							°C

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

Parameter	Test Conditions	Symbol	SPP1A	SPP2A	SPP3A	SPP4A	SPP5A	SPP6A	SPP7A	Unit
Maximum Instantaneous Forward Voltage	1 A	V _F	1.1						V	
Maximum DC Reverse Current at rated DC Blocking Voltage	T _A =25°C T _A =125°C	I _R	5 50						µA	
Typical Reverse Recovery Time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	1.8						µs	
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	5						pF	
Typical Thermal Resistance ¹⁾	Juntion to Mount	R _{θJM}	55						°C/W	

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 PC

Ratings and Characteristics Curves

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

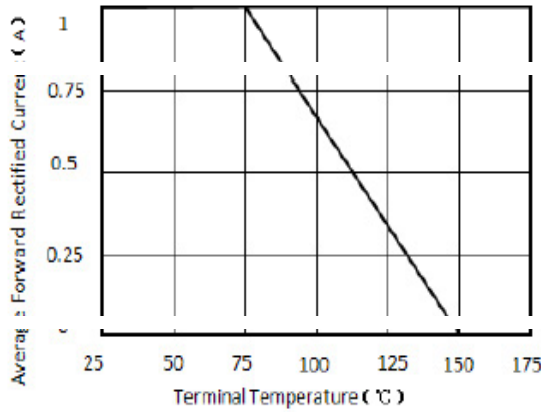


Figure 1. Forward Current Derating Curve

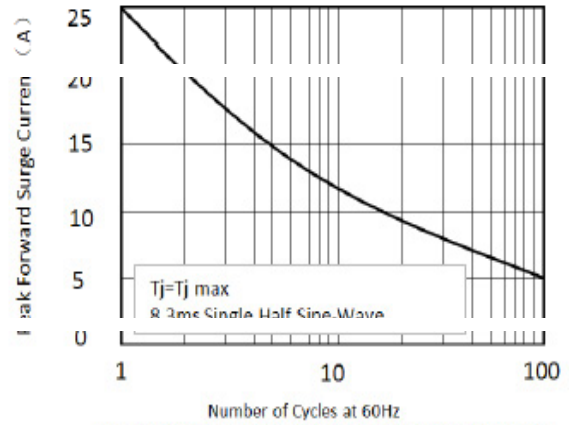


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

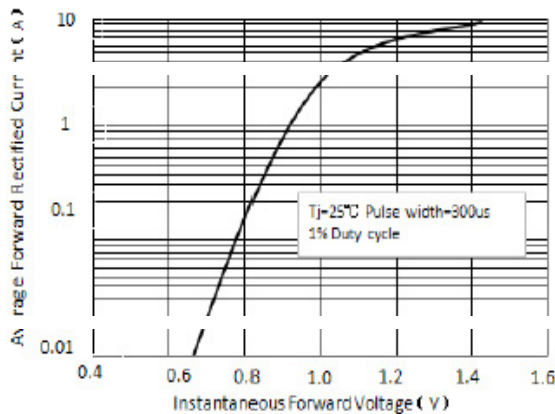


Figure 3. Typical Instantaneous Forward Characteristics

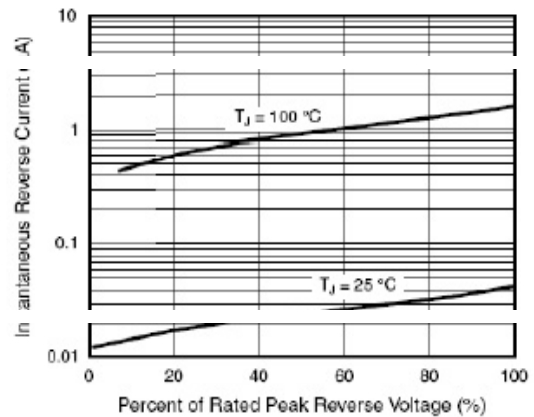


Figure 4. Typical Reverse Characteristics

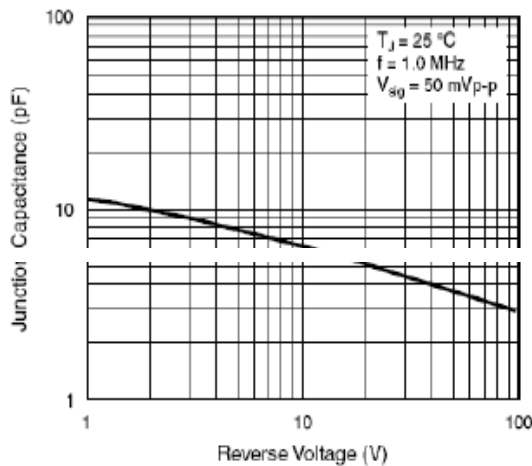


Figure 5. Typical Junction Capacitance

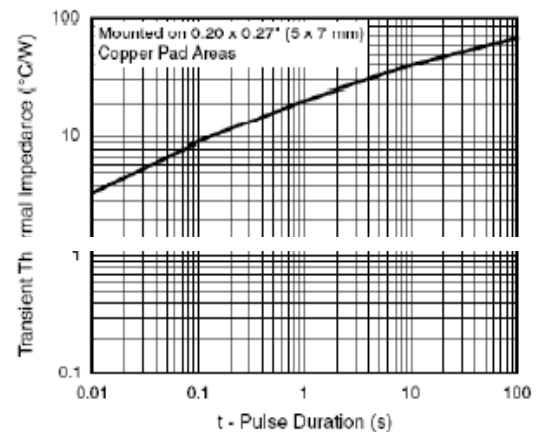
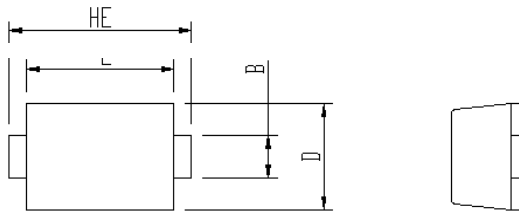


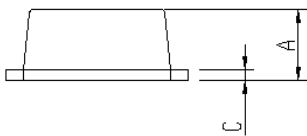
Figure 6. Typical Transient Thermal Impedance

Package Outline Dimensions

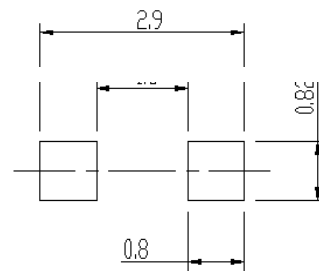
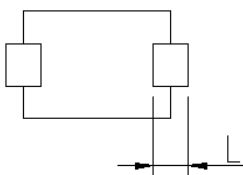
eSGP (SOD-323F)



Package	Unit:mm		Unit:inch	
	MIN	MAX	MIN	MAX
eSGP				
A	0.9	1.08	0.035	0.043
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	2.0	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

