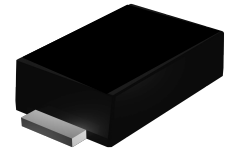


## Features

- Glass passivated fast recovery rectifiers
- Very low profile - typical height of 1.0 mm
- Low forward voltage drop
- Low leakage current
- **Moisture sensitivity:** level 1, per J-STD-020
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



Package: eSGA  
(SOD-123FL)



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

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.2	A
Peak Forward Surge Current (8.3 ms Single Half Sine-Wave Superimposed on Rated Load)	$I_{FSM}$	50	A
Operating Junction, Storage Temperature Range	$T_J, T_{STG}$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Test Conditions	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage	1 .2A	$V_F$	1.3	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5 50	$\mu\text{A}$
Maximum Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$	$t_{rr}$	250	nS
Typical Junction Capacitance	4.0 V, 1 MHz	$C_J$	7.5	pF
Typical Thermal Resistance	Juntion to Mount	$R_{\theta JM}^{(1)}$	3.3	$^\circ\text{C}/\text{W}$
	Juntion to Ambient	$R_{\theta JA}^{(1)}$	67	
	Juntion to Case	$R_{\theta JC}^{(1)}$	25	

Note 1. Mounted on PCB with 5.0×5.0mm copper pads, 2oz. FR4 PCB

## Ratings and Characteristics Curves

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

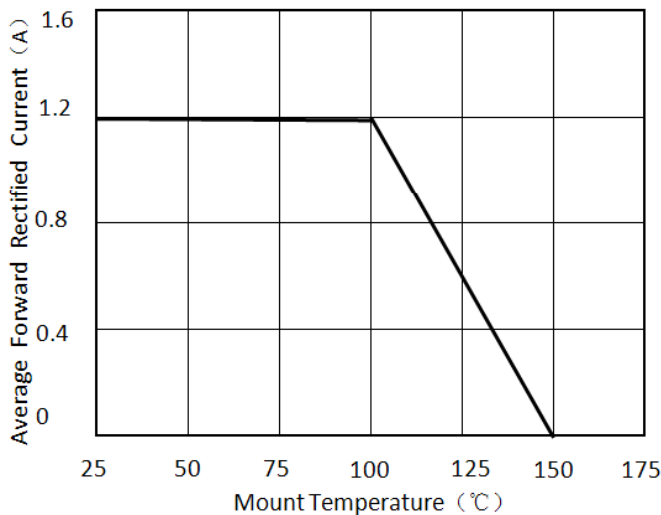


Figure 1. Forward Current Derating Curve

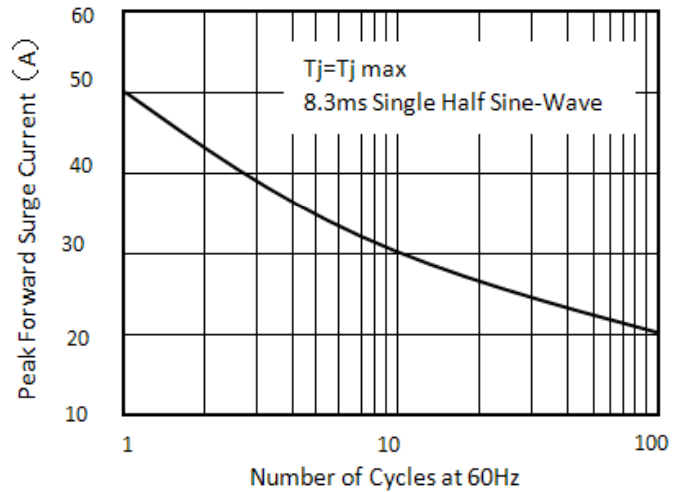


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

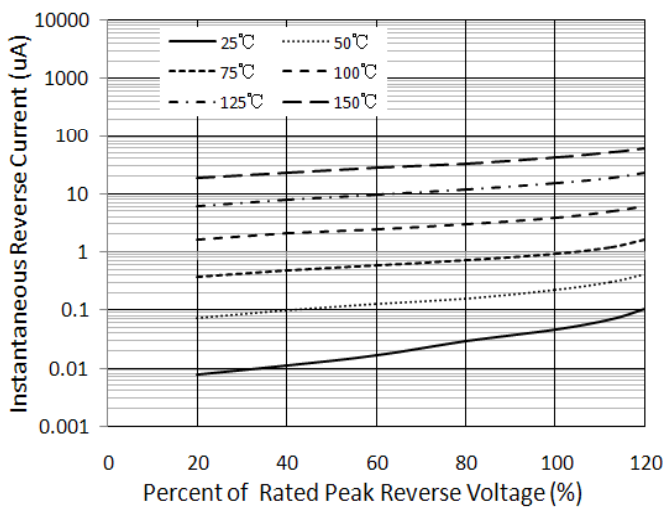


Figure 3. Typical Reverse Characteristics

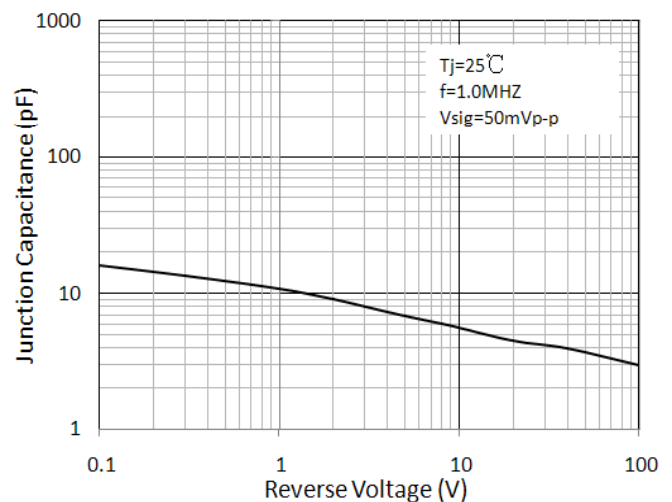


Figure 4. Typical Junction Capacitance

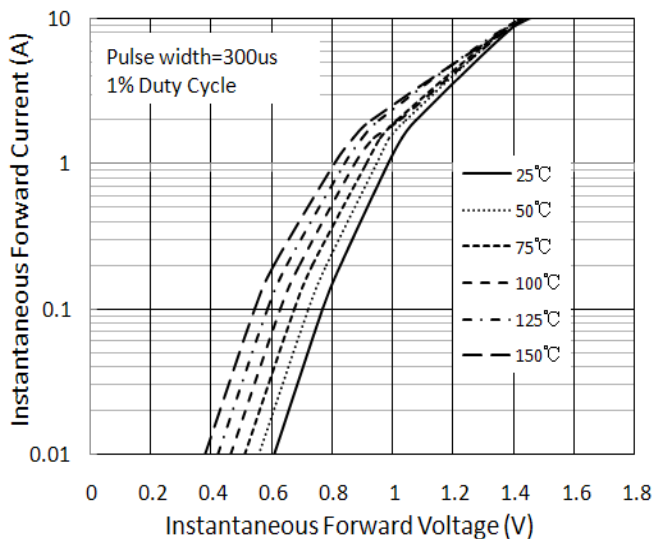
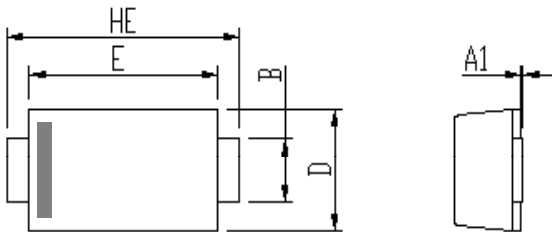


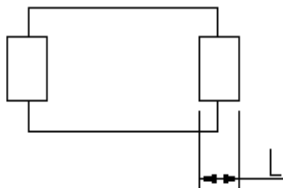
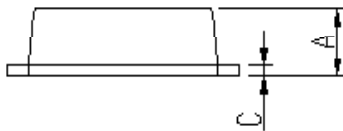
Figure 5. Typical Instantaneous Forward Characteristics

## Package Outline Dimensions

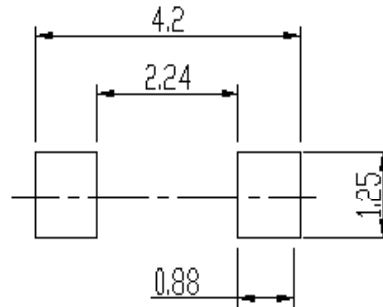
eSGA(SOD-123FL)



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	0.85	1.05	0.033	0.041
C	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
E	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154



Soldering  
footprint



## Packing Information

Packing quantities:

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

Tape & Reel Specification

