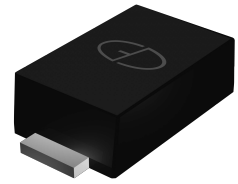


## Features

- Glass passivated standard rectifier
- 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



Package: eSGA  
(SOD-123FL)



**RoHS**  
COMPLIANT

## Maximum Ratings (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	MA1	MA2	MA3	MA4	MA5	MA6	MA7	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at TL (See Fig.1)	I <sub>F(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed On Rated Load	I <sub>FSM</sub>	40							A
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150							°C

## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Conditions	Symbol	MA1	MA2	MA3	MA4	MA5	MA6	MA7	Unit
Maximum Instantaneous Forward Voltage	1 A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	5							μA
	T <sub>A</sub> =125°C		50							
Typical Reverse Recovery Time	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A	t <sub>rr</sub>	1.8							μs
Typical Junction Capacitance	4.0 V, 1 MHz	C <sub>J</sub>	6							pF
Typical Thermal Resistance <sup>1)</sup>	Junction to Ambient	R <sub>θJA</sub>	63							°C/W
	Junction to Case	R <sub>θJC</sub>	22							
	Junction to Mount	R <sub>θJM</sub>	2							

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 Characteristic Curves

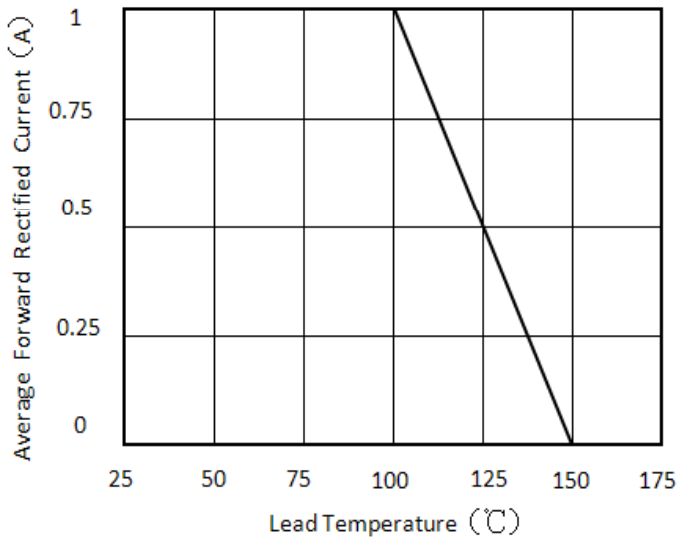


Figure 1. Forward Current Derating Curve

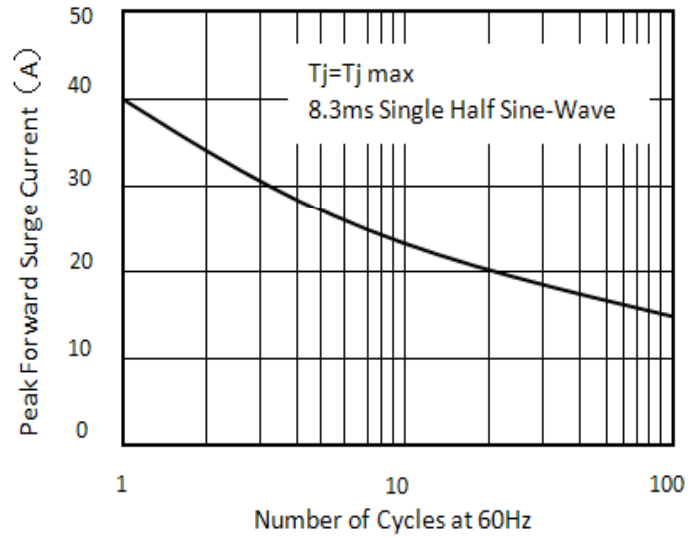


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

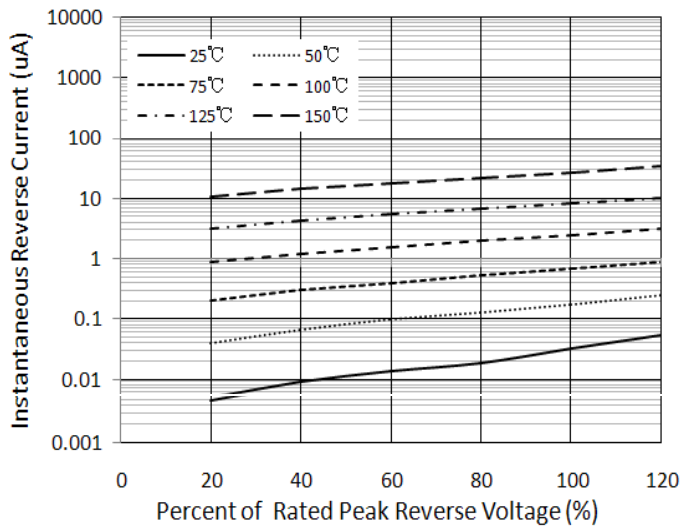


Figure 3. Typical Reverse Characteristics

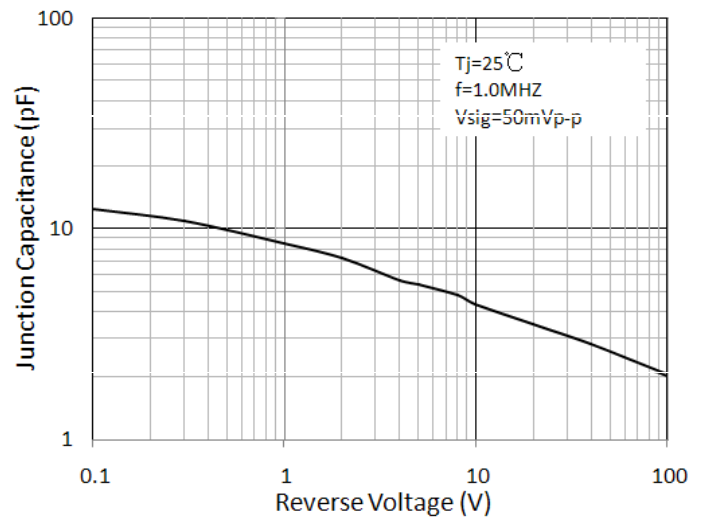


Figure 4. Typical Junction Capacitance

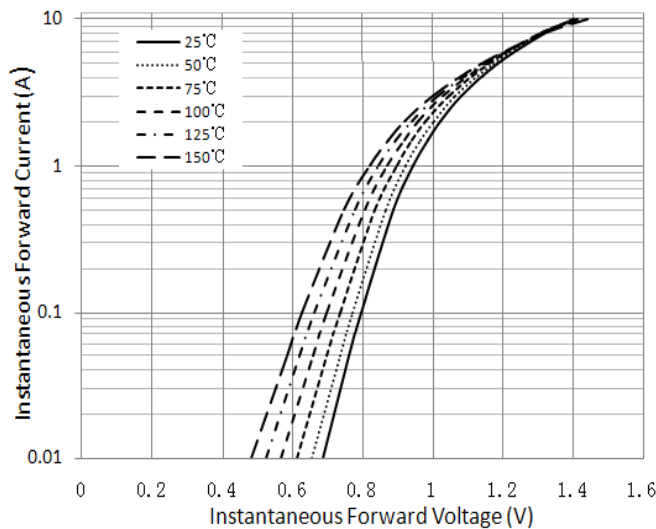
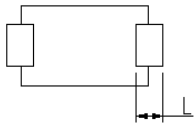
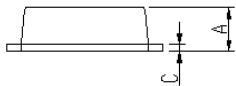
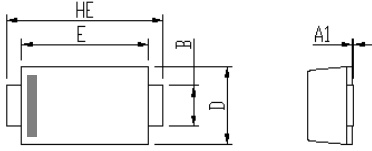


Figure 5. Typical Instantaneous Forward Characteristics

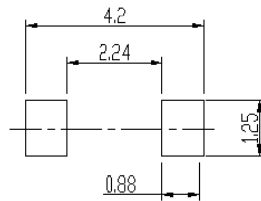
## Package Outline Dimensions

in inches (millimeters)

eSGA(SOD-123FL)



Soldering Footprint



DIM	Unit:mm		Unit:inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0	0.004
B	0.85	1.05	0.033	0.041
C	0.1	0.25	0.004	0.01
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

## Packing Information

Packing quantities:

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

Tape & Reel Specification

