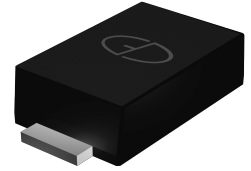


Features

- Glass passivated superfast recovery Rectifiers
- 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)



RoHS
COMPLIANT

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 noted)

Parameter	Symbol	FU1	FU2	FU3	FU4	FU5	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1					A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I _{FSM}	30					A
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150					°C

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

Parameter	Test Conditions	Symbol	FU1	FU2	FU3	FU4	FU5	Unit
Maximum Instantaneous Forward Voltage	1 A	V _F	0.95			1.3	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C T _A =125°C	I _R	5.0 100					μA
Maximum Reverse Recovery Time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	35					nS
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	0.75					pF
Typical Thermal Resistance ¹⁾	junction to ambient	R _{θJA}	66					°C/W
	junction to case	R _{θJC}	32					
	junction to mount	R _{θJM}	1					

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

Ratings and Characteristics Curves

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

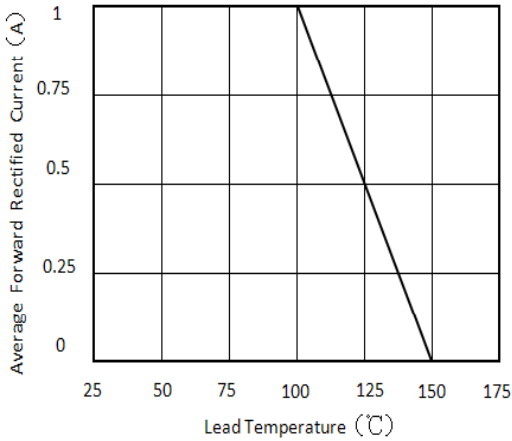


Figure 1. Forward Current Derating Curve

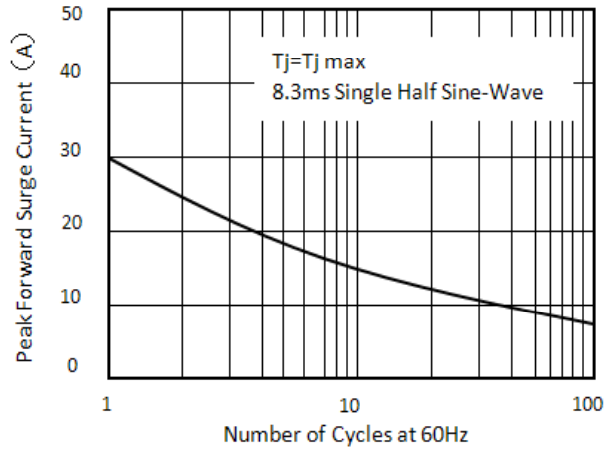


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

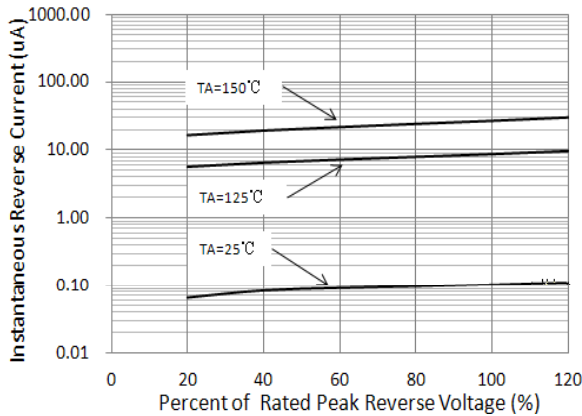


Figure 3. Typical Reverse Characteristics

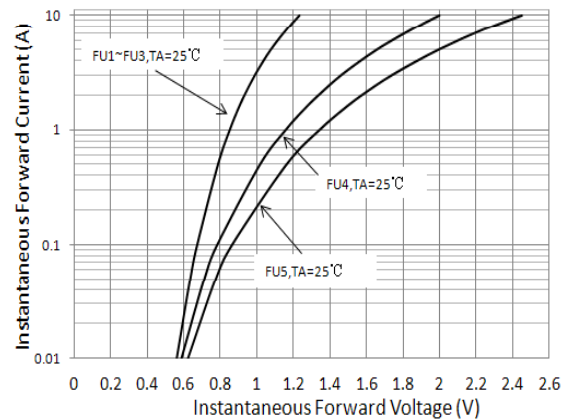


Figure 4. Typical Instantaneous Forward Characteristics

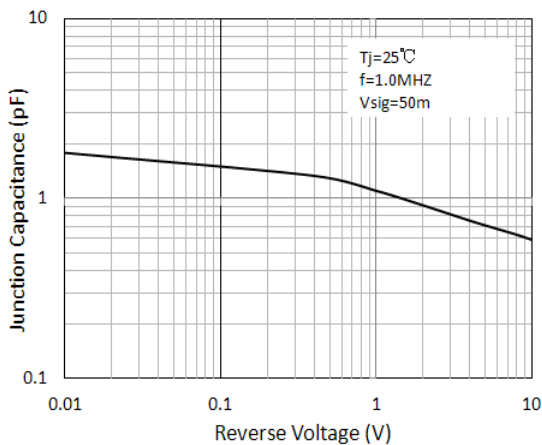
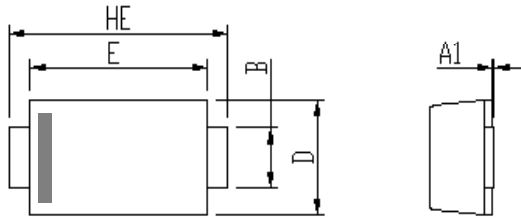


Figure 5. Typical Junction Capacitance

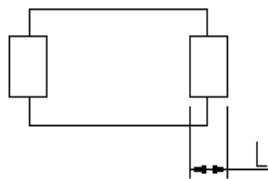
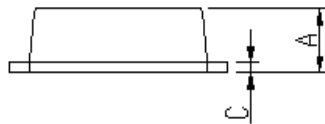
Package Outline Dimensions

in inches (millimeters)

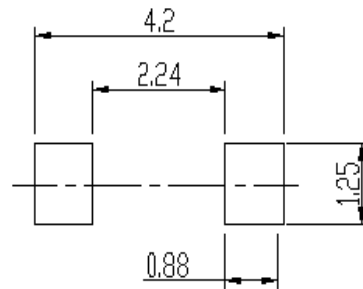
Package: eSGA
(SOD-123FL)



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

