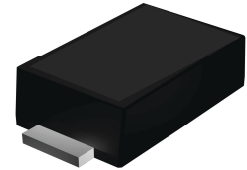


Features

- Glass passivated standard 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)



RoHS
COMPLIANT

Applications

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

Absolute Maximum Ratings (single-phase, half-wave, 60Hz, $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	F1510A	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	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I_{FSM}	52	A
Operating Junction and 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	F1510A	Unit
Maximum Instantaneous Forward Voltage	1.5A	V_F	1.1	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	μA
Typical Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$	t_{rr}	1.8	μs
Typical Junction Capacitance	4.0 V, 1 MHz	C_J	6	pF
Typical Thermal Resistance ¹⁾	Junction to Ambient	$R_{\theta JA}$	70	$^\circ\text{C/W}$
	Junction to Case	$R_{\theta JC}$	35	
	Junction to Mount	$R_{\theta JM}$	14	

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 PCB

Typical Electrical Characteristic Curves

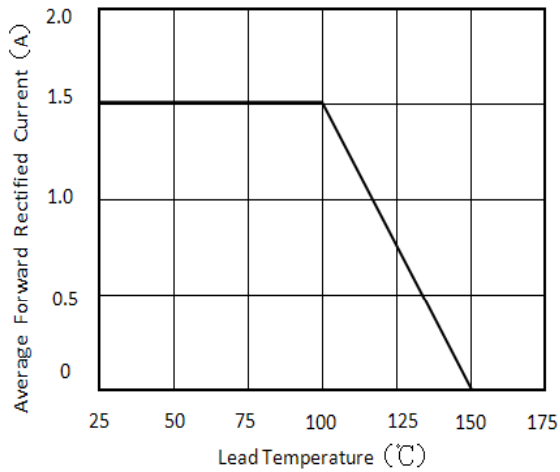


Figure 1. Forward Current Derating Curve

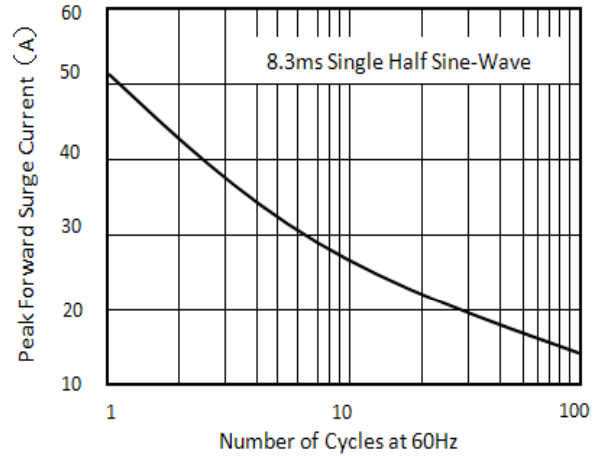


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

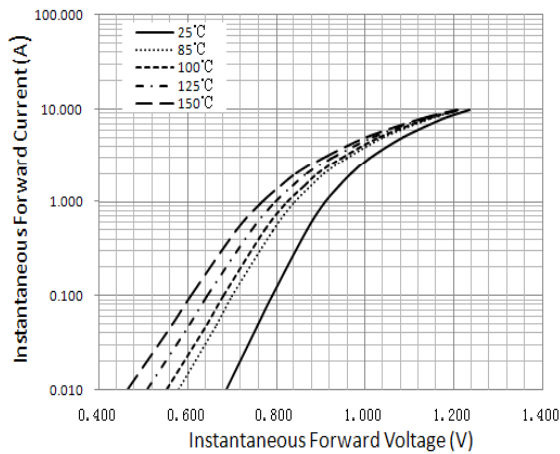


Figure 3. Typical Instantaneous Forward Characteristics

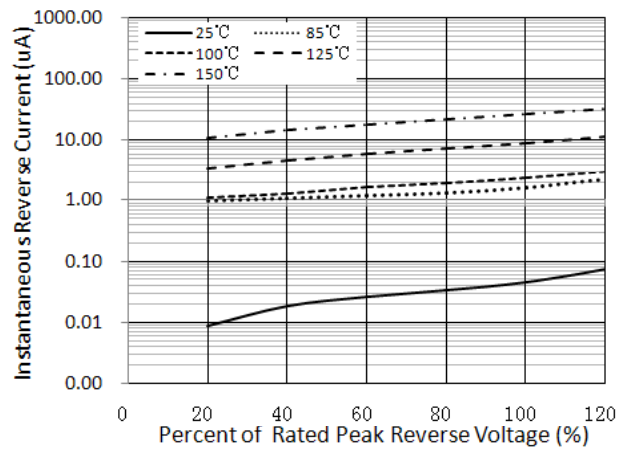
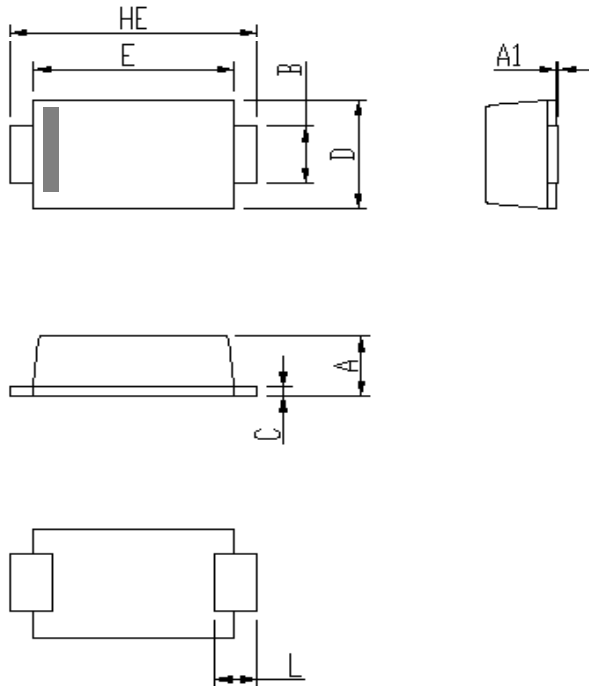


Figure 4. Typical Reverse Characteristics

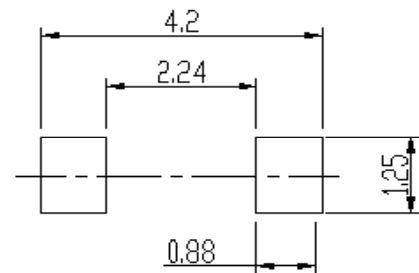
Package Outline Dimensions

in inches (millimeters)



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

