

Features

- 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 in general purpose rectifications in lighting, cellular phones, portable devices, power supplies and other consumer applications.

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

Parameter	Symbol	FH1	FH2	FH3	FH4	FH5	FH6	FH7	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	I _{F(AV)}	1.0							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	FH1	FH2	FH3	FH4	FH5	FH6	FH7	Unit
Maximum Instantaneous Forward Voltage	1 A	V _F	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				100			μA
Maximum Reverse Recovery Time	I _F =0.5A, I _R =1.0A I _{rr} =0.25A	t _{rr}	50				75			nS
Typical Thermal Resistance ¹⁾	Juntion to Ambient	R _{θJA}	66							°C/W
	Juntion to Case	R _{θJC}	28							
	Juntion to Mount	R _{θJM}	1							

Note: 1) The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 5×5mm copper pads, 20Z, FR4 PCB

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

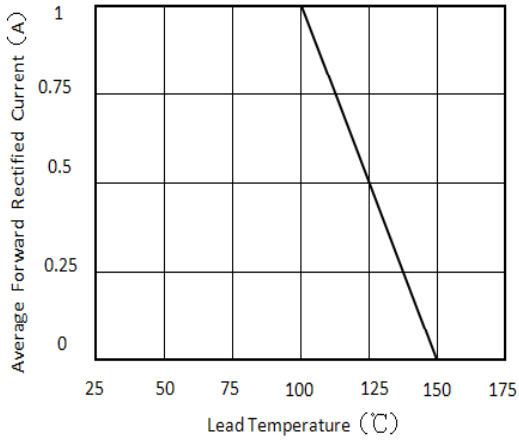


Figure 1. Forward Current Derating Curve

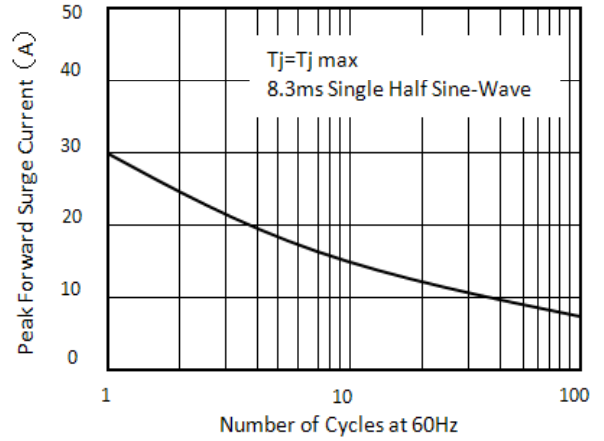


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

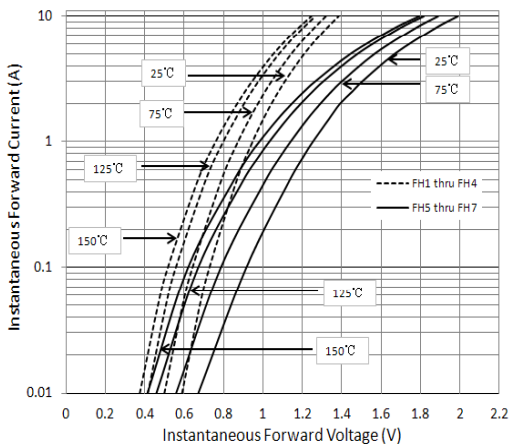


Figure 3. Typical Instantaneous Forward Characteristics

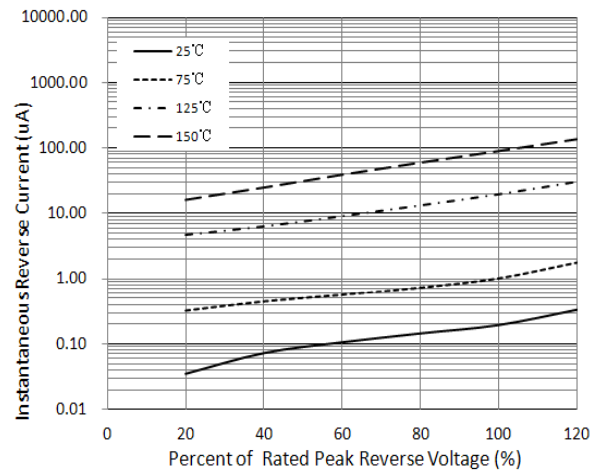
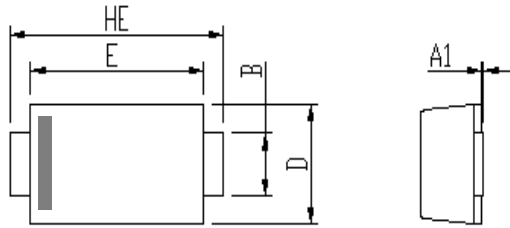


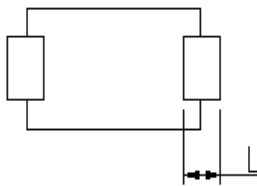
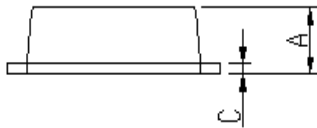
Figure 4. Typical Reverse Characteristics

Package Outline Dimensions

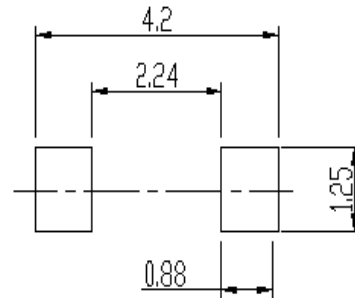
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DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
B	0.85	1.05	0.033	0.041
C	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
E	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154



Soldering footprint



Packing Information

Packing Quantities

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

Tape & Reel Specifications

