

# Surface Mount Glass Passivated Standard Rectifier Reverse Voltage 1200~2000V Forward Current 1A

#### Features

- · Glass passivated Standard Rectifiers
- Very low profile typical height of 1.0 mm
- Ideal for automated placement
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds





eSGA (SOD-123FL)

## Typical Applications

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

Maximum Ratings (TA = 25 °C unless otherwise noted)							
Parameter	Symbol	F8A	F9A	F10A	Unit		
Maximum repetitive peak reverse voltage	VRRM	1200	1500	2000	V		
Maximum RMS voltage	VRMS	840	1050	1400	V		
Maximum DC blocking voltage	VDC	1200	1500	2000	V		
Maximum average forward rectified current	IF(AV)	1.0		Α			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30			А		
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150		°C			

Electrical Characteristics (TA = 25 °C unless otherwise noted)							
Parameter	Test Conditions	Symbol	F8A	F9A	F10A	Unit	
Maximum instantaneous forward voltage	1.0A ,TA=25°C	V <sub>F</sub>	1.1		Volts		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I <sub>R</sub>	5			μА	
Typical junction capacitance	4.0 V, 1 MHz	CJ	5.4		pF		
Typical thermal resistance <sup>1)</sup>	juntion to ambient	$R_{\theta JA}$	70			°C/W	

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

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## Ratings and Characteristics Curves

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

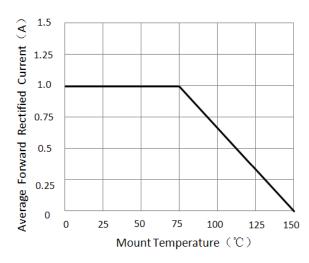


Figure 1. Forward Current Derating Curve

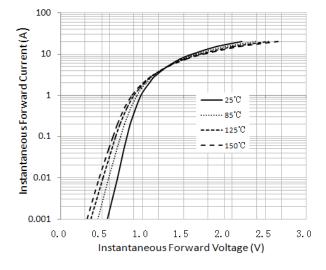


Figure 3. Typical Instantaneous Forward Characteristics

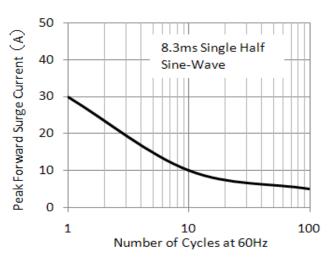


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

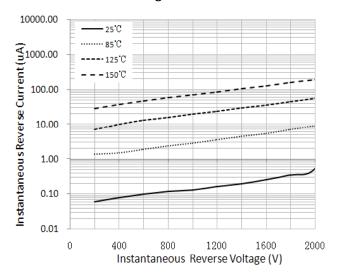


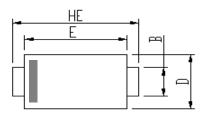
Figure 4. Typical Reverse Characteristics

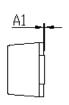
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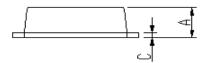


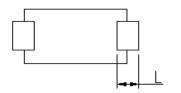
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# Package Outline Dimensions



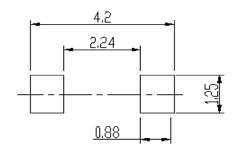






DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
В	0.85	1.05	0.033	0.041
С	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
Е	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154

Soldering footprint

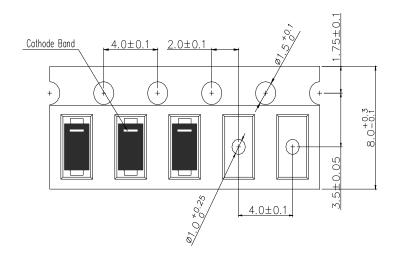


# Packing Information

Packing quantities:

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

**Tape & Reel Specification** 





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