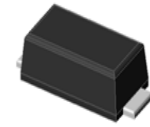


## Features

- Glass passivated Fast Recovery 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 /10 seconds
- Halogen-free according to IEC 61249-2-21 definition



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	RS1210FL	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	1.2	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50	A
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)				
PARAMETER	TEST CONDITIONS	SYMBOL	RS1210FL	UNIT
Maximum instantaneous forward voltage	1.2A	V <sub>F</sub>	1.3	Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25	I <sub>R</sub>	5	μA
	TA=125		50	
Maximum 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>	250	nS
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>	7.5	pF
Typical thermal resistance	junction to mount	R <sub>θJM</sub> <sup>(1)</sup>	3.3	°C/W
	junction to ambient	R <sub>θJA</sub> <sup>(1)</sup>	67	
	junction to case	R <sub>θJC</sub> <sup>(1)</sup>	25	

Note1): Mounted on PCB with 5.0x5.0mm copper pads, 2 OZ, FR4 PCB;

## RATINGS AND CHARACTERISTICS CURVES

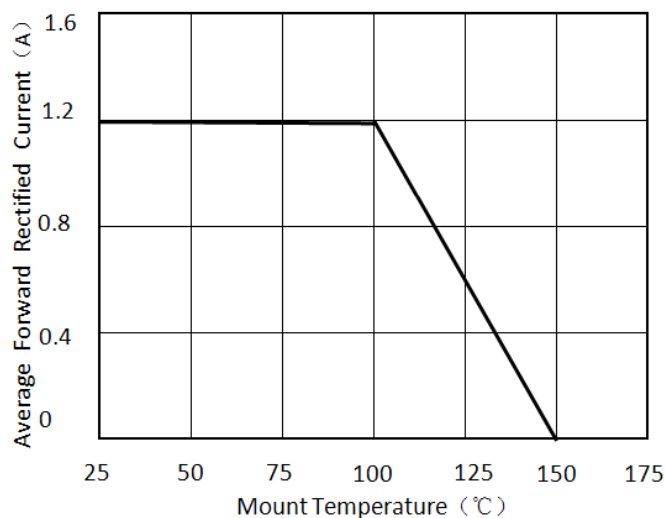


Figure 1. Forward Current Derating Curve

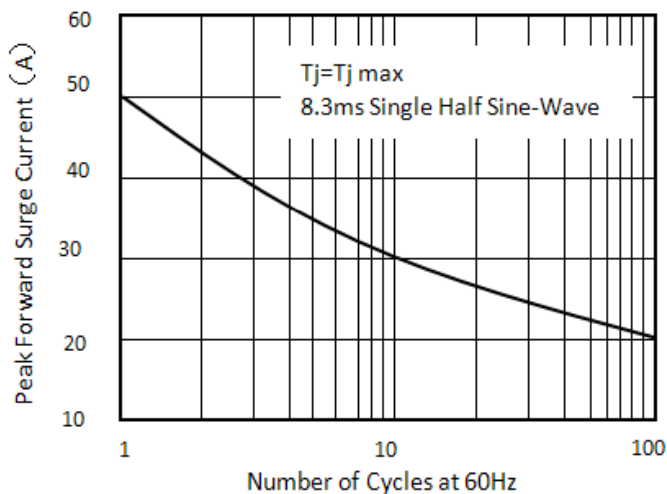


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

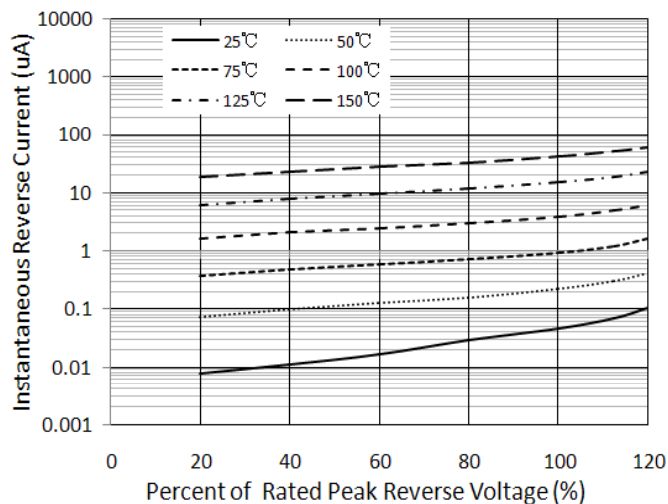


Figure 3. Typical Reverse Characteristics

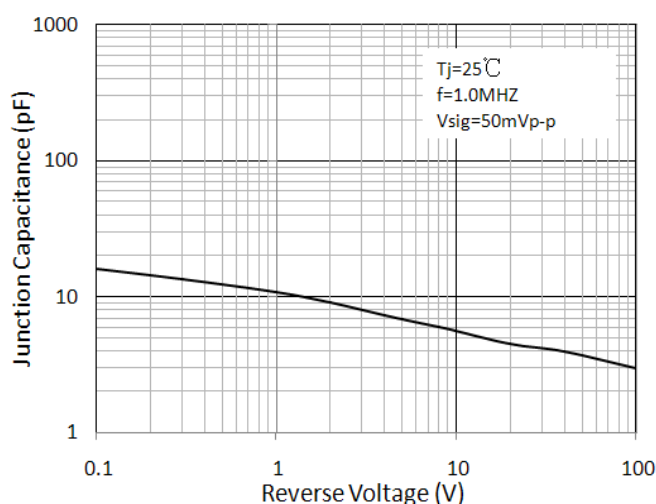


Figure 4. Typical Junction Capacitance

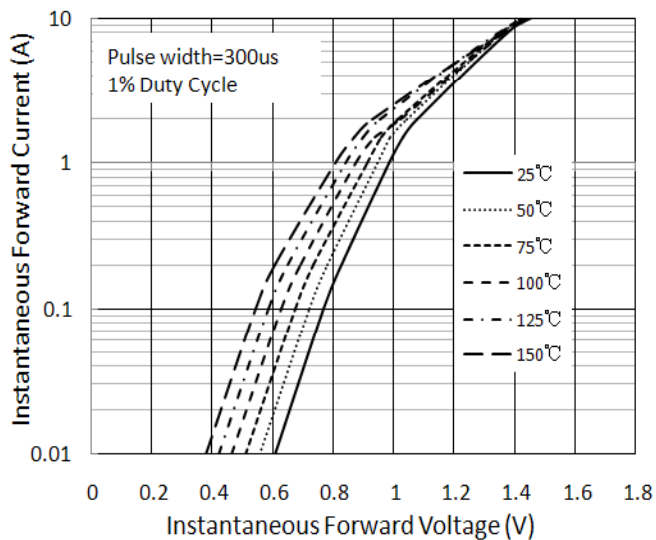
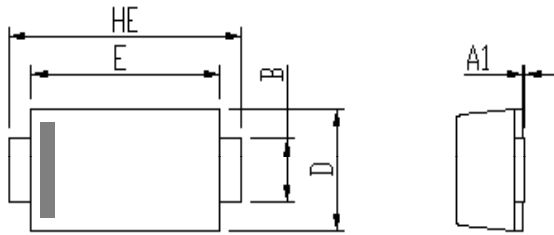
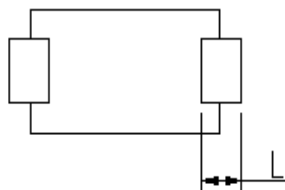
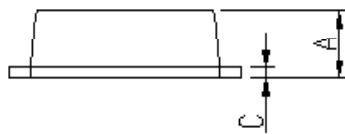


Figure 5. Typical Instantaneous Forward Characteristics

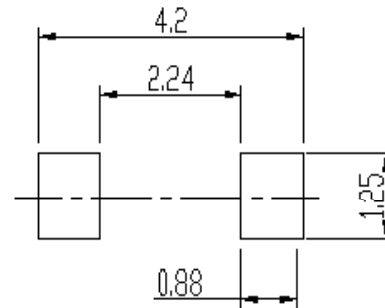
## PACKAGE OUTLINE DIMENSIONS



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

