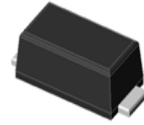
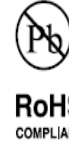


Features

- Glass passivated Standard Rectifiers
- Very low profile - typical height of 1.0 mm
- Low forward voltage drop , Low leakage current
- ESD capability
- 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, power supplies and other consumer applications, polarity protection, and rail tail protection in both consumer and automotive applications.

MAXIMUM RATINGS (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	SGA1J	UNIT
Maximum repetitive peak reverse voltage	VRRM	600	V
Maximum RMS voltage	VRMS	420	V
Maximum DC blocking voltage	VDC	600	V
Maximum average forward rectified current	IF(AV)	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	25	A
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)				
PARAMETER	TEST CONDITIONS	SYMBOL	SGA1J	UNIT
Maximum instantaneous forward voltage	1 A	VF	1.0	Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25	IR	5	µA
	TA=125		50	
Typical reverse recovery time	IF=0.5A, IR=1.0A, Irr=0.25A	tr	1.8	uS
Typical junction capacitance	4.0 V, 1 MHz	CJ	6	pF

IMMUNITY TO ELECTRICAL STATIC DISCHARGE TO THE FOLLOWING STANDARDS

(TA=25 , unless otherwise noted)

STANDARD	TEST TYPE	TEST CONDITIONS	SYBOL	CLASS	VALUE
JESD22-A114/AEC-Q101-001	Human body model(contact mode)	C=100pF,R=1.5KΩ	VC	H3A	> 4KV
JESD22-A115/AEC-Q101-002	Machine model(contact mode)	C=200pF,R=0Ω		M4	> 400V

THERMAL CHARACTERISTICS(TA=25 ,unless otherwise noted)

PARAMETER	SYMBOL	SGA1J	UNIT
Typical thermal resistance	$R_{\theta JA}$	70	/W
	$R_{\theta JM}$	15	
	$R_{\theta JC}$	35	

Note: Thermal resistance from junction to ambient and junction to lead mounted on PCB with 5.0mm*5.0mm copper pad areas.

RATINGS AND CHARACTERISTICS CURVES

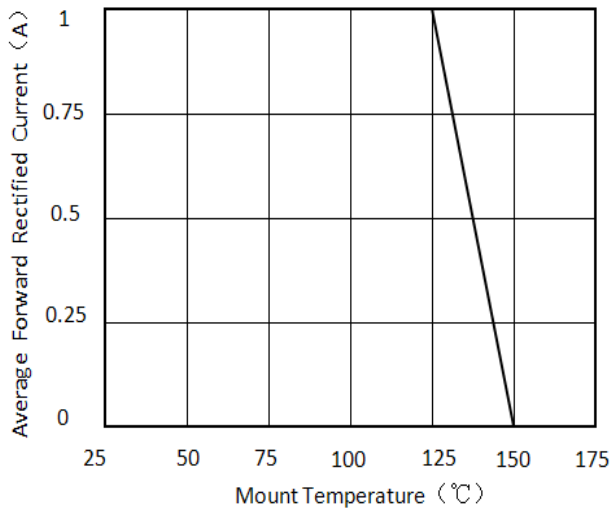


Figure 1. Forward Current Derating Curve

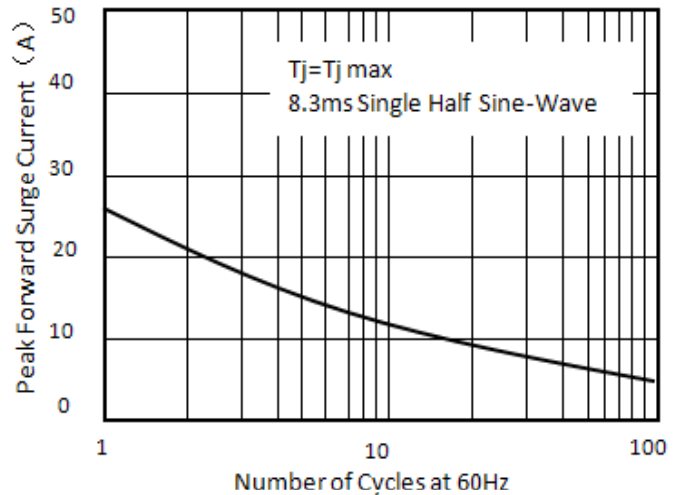


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

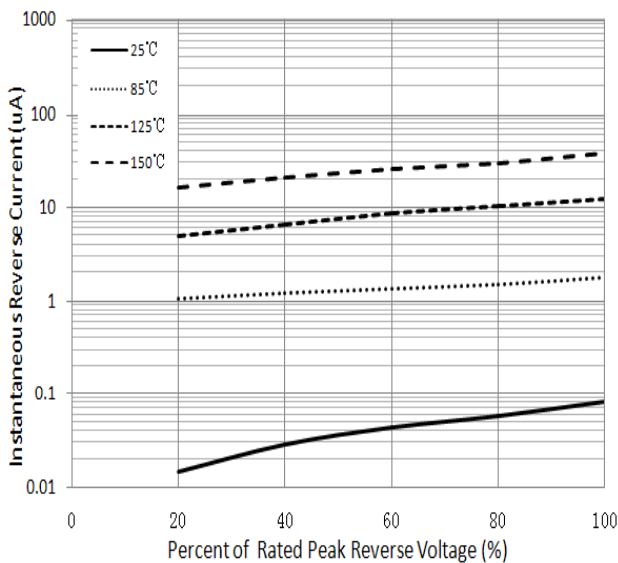


Figure 3. Typical Reverse Characteristics

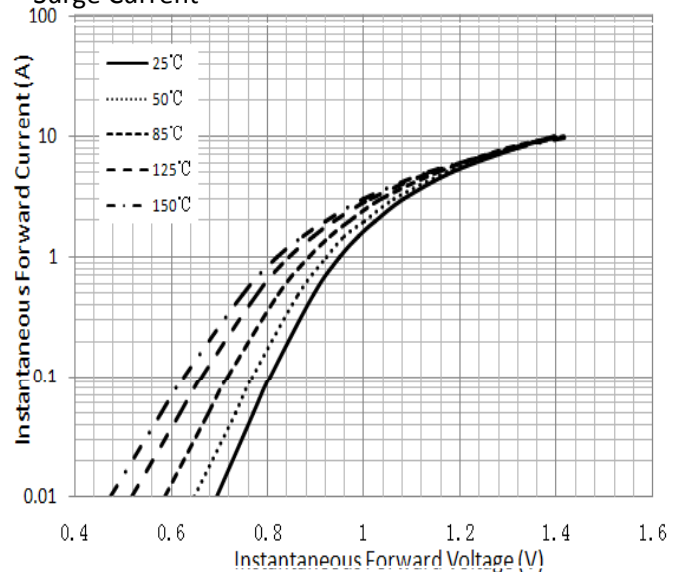
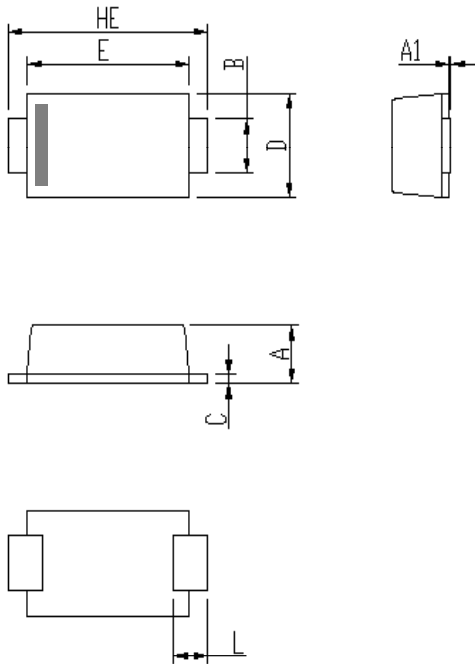


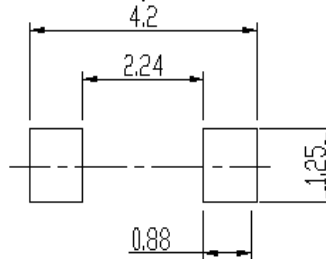
Figure 4. Typical Forward Characteristics

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

