

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



RoHS
COMPLIANT



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	AF1A	AF2A	AF3A	AF4A	AF5A	AF6A	AF7A	UNIT
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at TL (See Fig.1)	IF(AV)	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	40							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	AF1A	AF2A	AF3A	AF4A	AF5A	AF6A	AF7A	UNIT
Maximum instantaneous forward voltage	1 A	V _F	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	5							µA
	TA=125°C		50							
Typical reverse recovery time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	1.8							uS
Typical junction capacitance	4.0 V, 1 MHz	C _J	6							pF
Typical thermal resistance ¹⁾	junction to ambient	R _{θJA}	63							°C/W
	junction to case	R _{θJC}	22							
	junction to mount	R _{θJM}	2							

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 PC

RATINGS AND CHARACTERISTICS CURVES

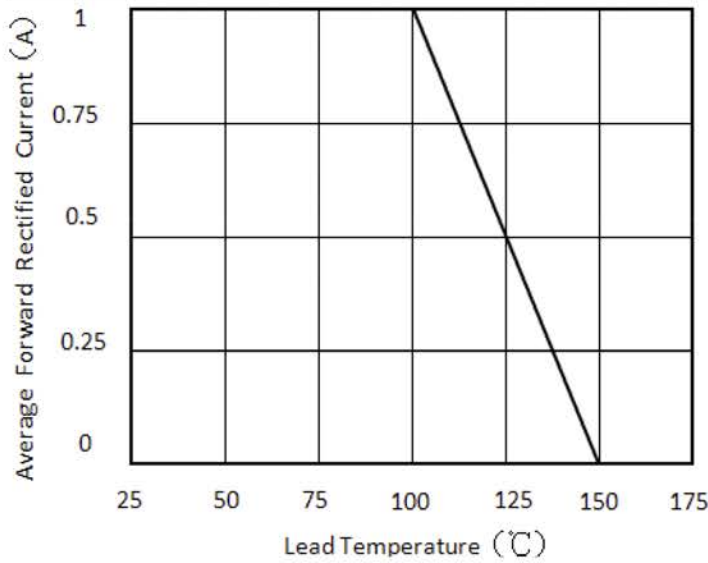


Figure 1. Forward Current Derating Curve

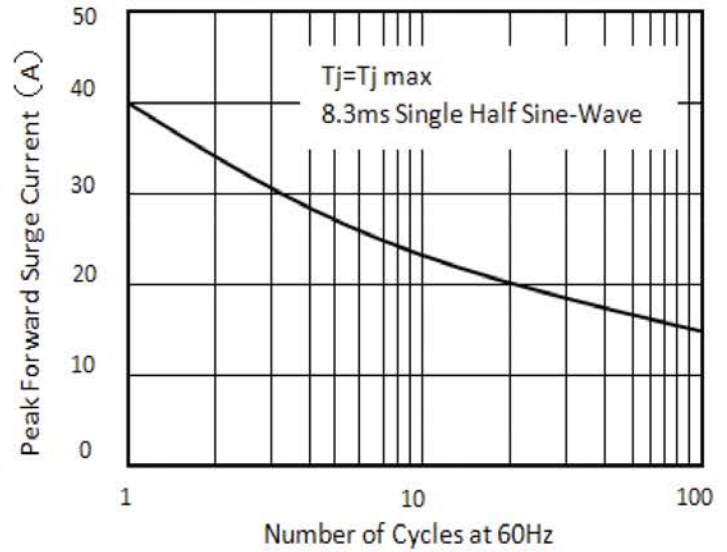


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

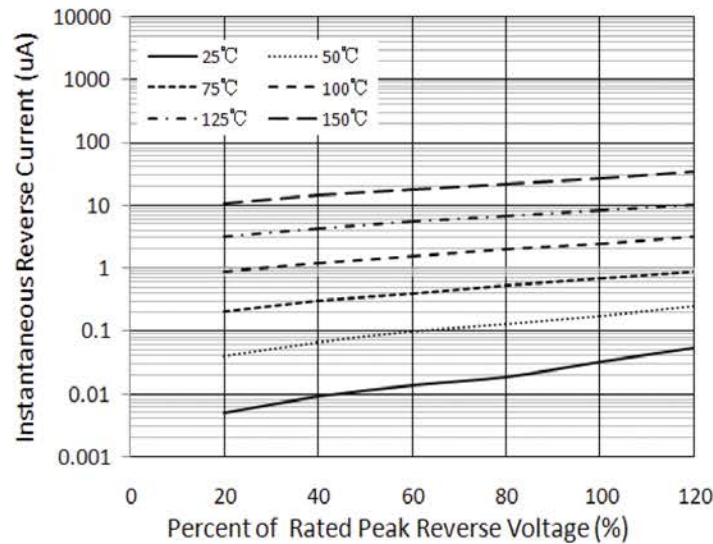


Figure 3. Typical Reverse Characteristics

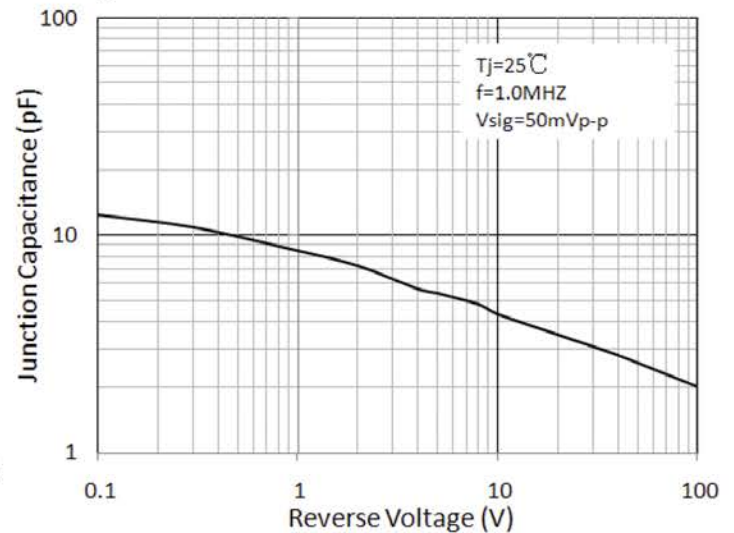


Figure 4. Typical Junction Capacitance

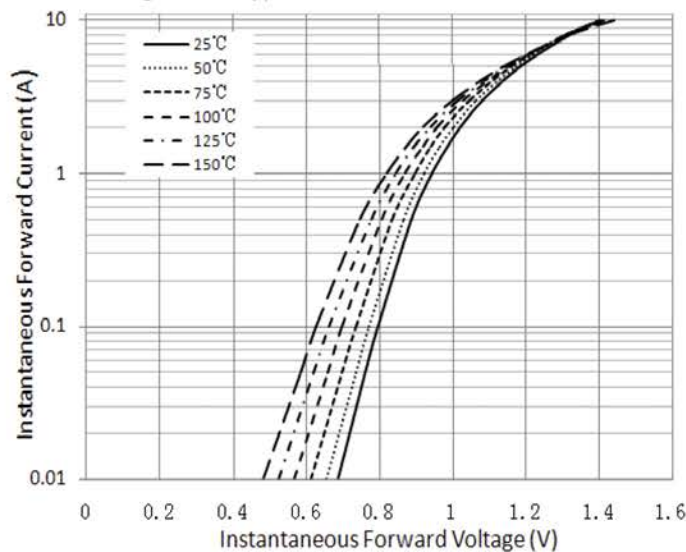
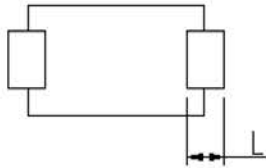
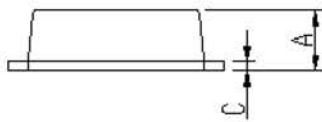
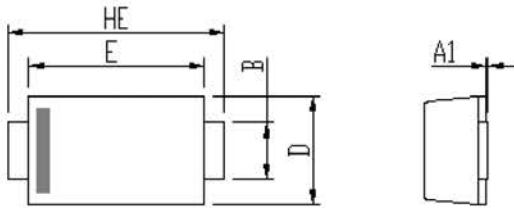


Figure 5. Typical Instantaneous Forward Characteristics

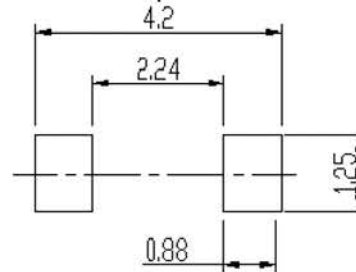


PACKAGE OUTLINE DIMENSIONS



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

