

**FH5 thru FH7****Surface Mount Glass Passivated High Efficiency Rectifier
Reverse Voltage 600~1000V Forward Current 1A**

Features

- Glass passivated High Efficiency 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

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	FH5	FH6	FH7	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	600	800	1000	V
Maximum RMS voltage	V _{RMS}	420	560	700	V
Maximum DC blocking voltage	V _{DC}	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 (TA = 25 °C unless otherwise noted)							
PARAMETER	TEST CONDITIONS	SYMBOL	FH5	FH6	FH7	UNIT	
Maximum instantaneous forward voltage	1 A	V _F	1.7			Volts	
Maximum DC reverse current at rated DC blocking voltage	TA=25 TA=125	I _R	5 100			µA	
Maximum reverse recovery time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	75			nS	
Typical junction capacitance	4.0 V, 1 MHz	C _J	15			pF	
Typical thermal resistance ¹⁾	junction to ambient	R _{θJA}	66			°C/W	
	junction to case	R _{θJC}	28				
	junction to mount	R _{θJM}	1				

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

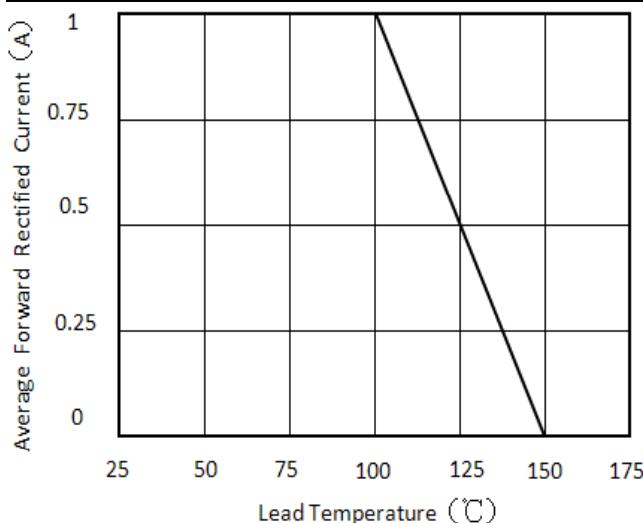
RATINGS AND CHARACTERISTICS CURVES


Figure 1. Forward Current Derating Curve

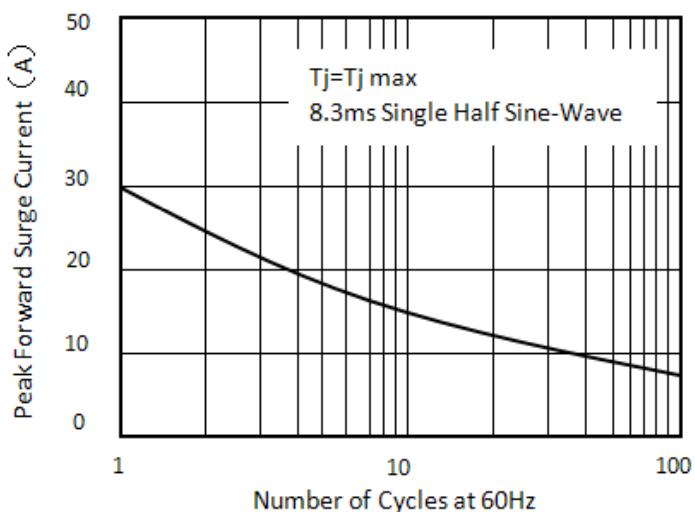


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

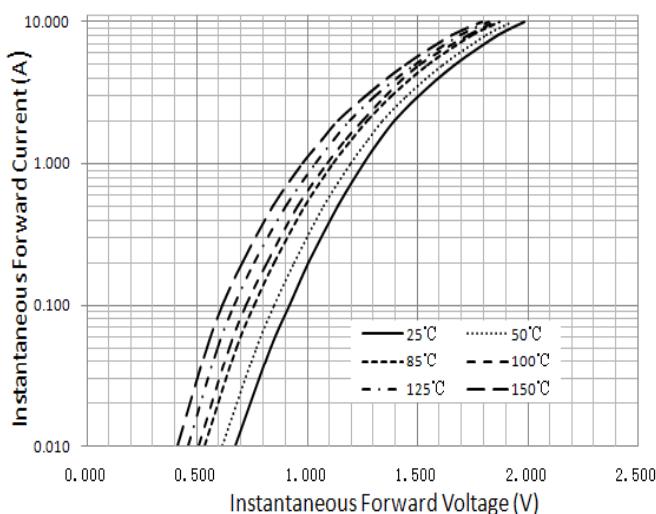


Figure 3. Typical Instantaneous Forward Characteristics

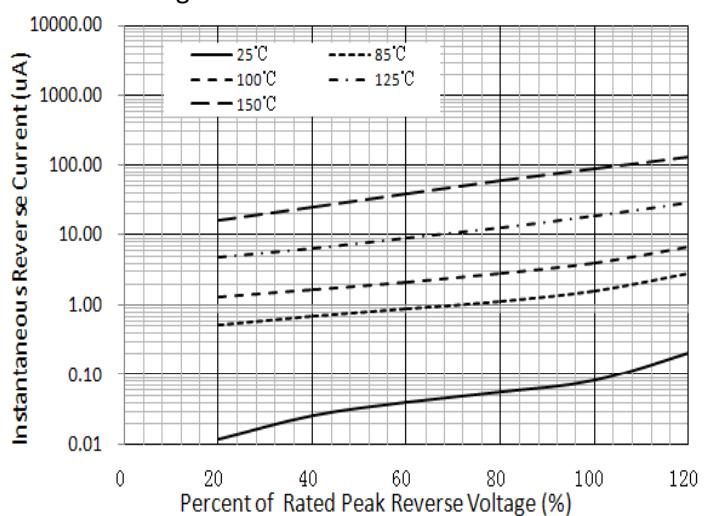


Figure 4. Typical Reverse Characteristics

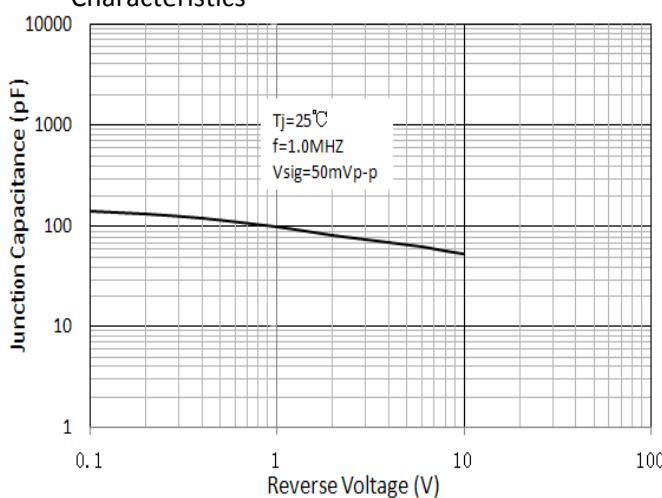
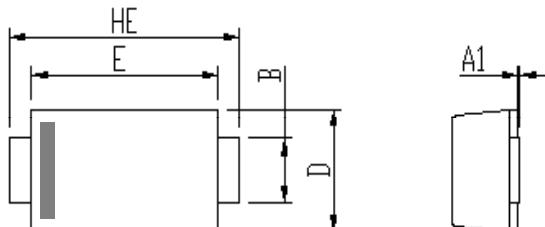
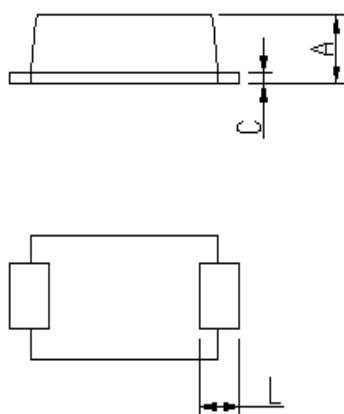
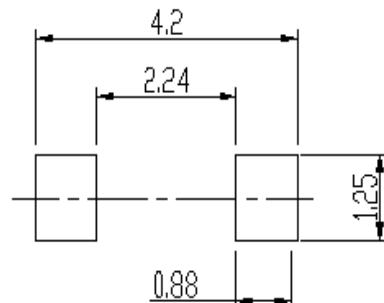


Figure 5. Typical Junction Capacitance

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

