

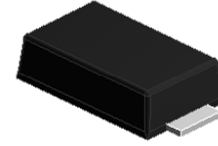


LF1 thru LF7

Surface Mount Glass Passivated Fast Recovery Rectifier
Reverse Voltage 50~1000V Forward Current 1A

Features

- Glass passivated fast recovery rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile, typical thickness 1.0mm
- AEC-Q101 qualified



eSGB (SMAF)

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	LF1	LF2	LF3	LF4	LF5	LF6	LF7	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	IF(AV)	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30							A
Rating for fusing(t<8.3ms)	I ² t	3.7							A ² sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150							°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)										
Parameter	Test Conditions	Symbol	LF1	LF2	LF3	LF4	LF5	LF6	LF7	Unit
Maximum instantaneous forward voltage	IF=1 A, TA=25°C	V _F	1.3							V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C TA=125°C	I _R	5 50							μA
Maximum reverse recovery time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	150				250	500		nS
Typical junction capacitance	4.0 V, 1 MHz	C _J	11							pF
Typical thermal resistance ¹⁾	junction to case	R _{θJC}	45							°C/W
	junction to mount	R _{θJM}	12							

Note:1),The thermal resistance from junction to case and mount,mounted on P.C.B with 8x8mm copper pads,2 OZ,FR4 PCB



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Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

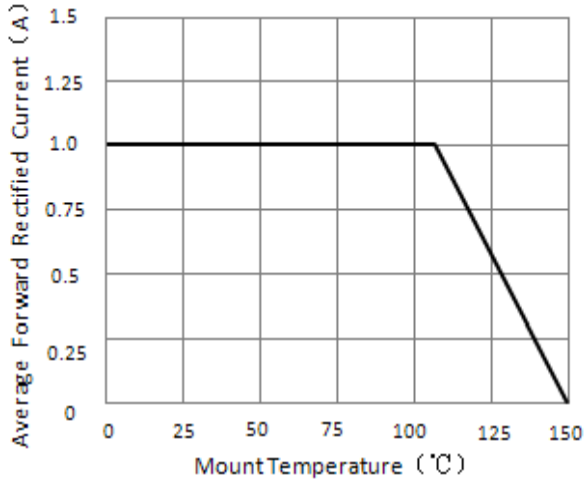


Figure 1. Forward Current Derating Curve

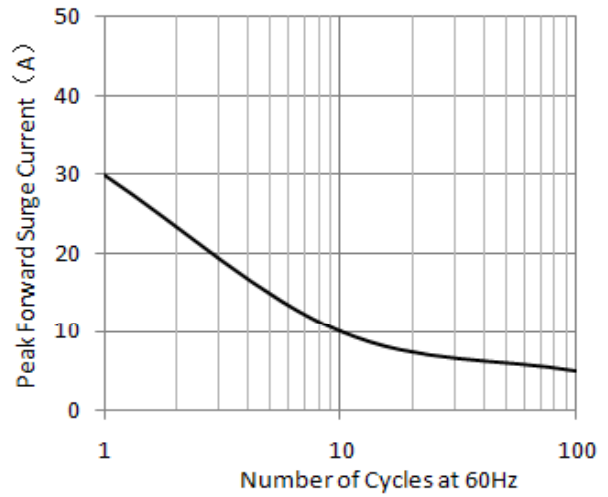


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

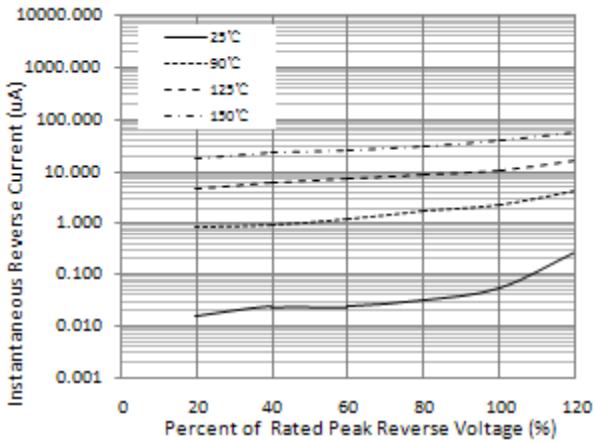


Figure 3. Typical Reverse Characteristics

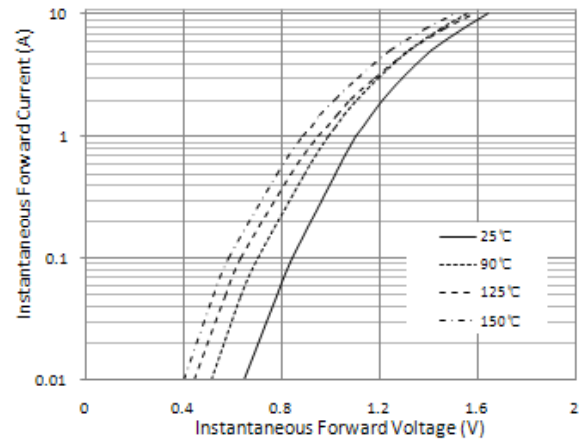
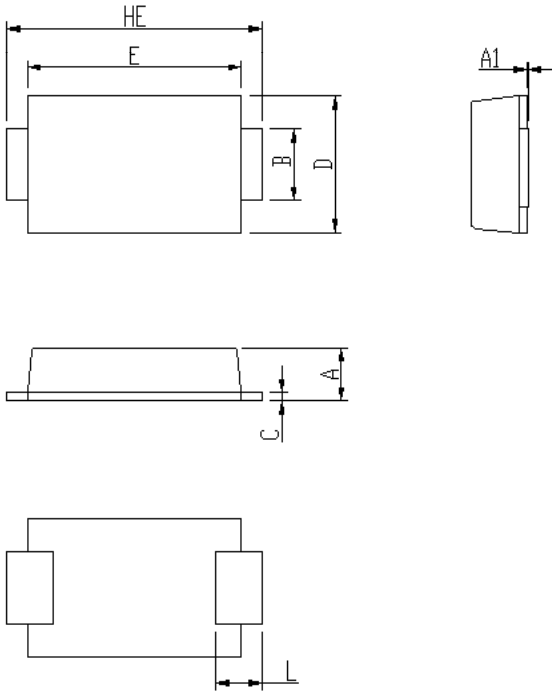


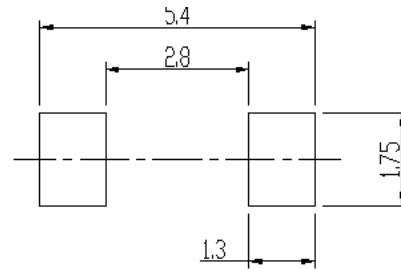
Figure 4. Typical Instantaneous Forward Characteristics

Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.92	1.08	0.036	0.043
A1	0	0.1	0.000	0.004
B	1.25	1.45	0.049	0.057
C	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
E	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205

Soldering footprint

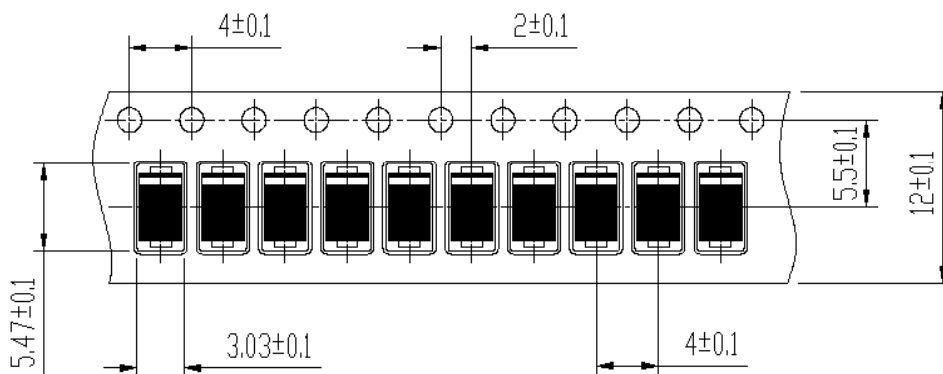


Packing Information

Packing quantities:

Reel size	Quantity/reel	Quantity/inner Box	Quantity/Carton
7"	3K	21K	84K
13"	10K	20K	180K

Tape & Reel Specification





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