L2F1 thru L2F7

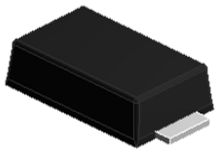
Surface Mount Glass Passivated Fast Recovery Rectifier

Reverse Voltage 50~1000V Forward Current 2A

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

RoHS COMPLIANT



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	L2F1	L2F2	L2F3	L2F4	L2F5	L2F6	L2F7	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)	2.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60							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	L2F1	L2F2	L2F3	L2F4	L2F5	L2F6	L2F7	Unit
Maximum instantaneous forward voltage	IF=2 A,TA=25℃	V_F	1.3							V
Maximum DC reverse current at rated DC blocking voltage	TA=25℃ TA=125℃	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)]	juntion to mount	$R_{\theta JM}$	12							℃/W

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

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

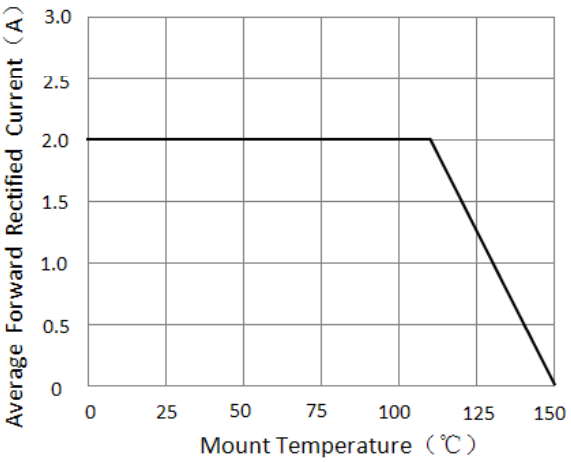


Figure 1.Forward Current Derating Curve

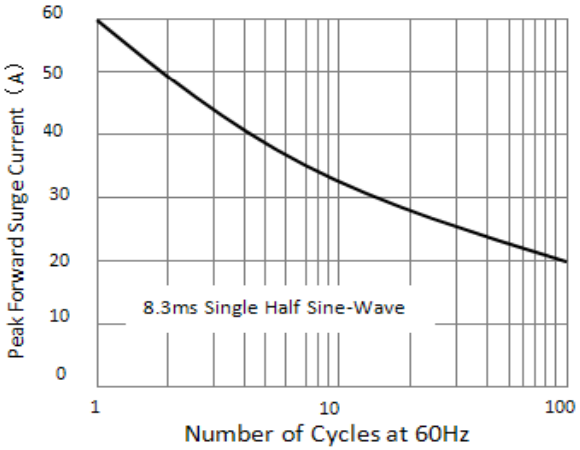


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

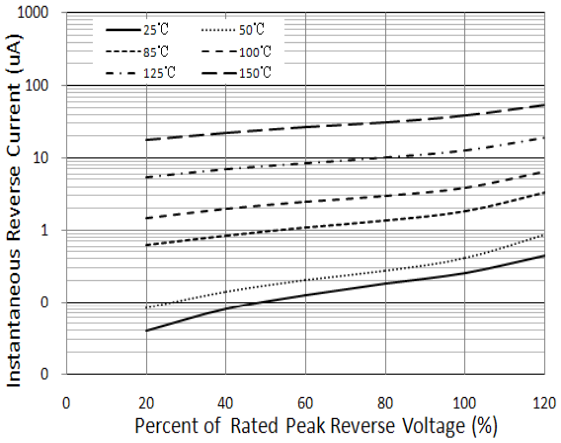


Figure 3. Typical Reverse Characteristics

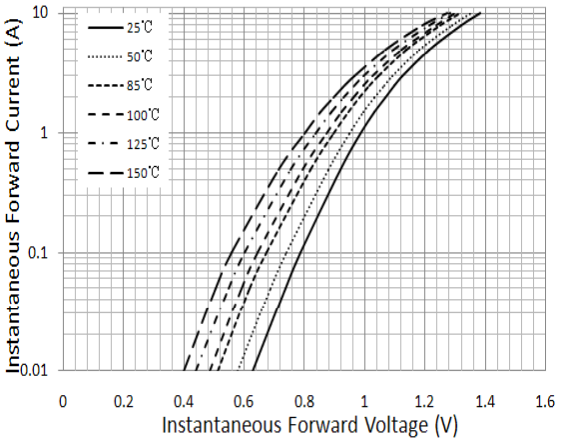


Figure 4. Typical Instantaneous Forward Characteristics

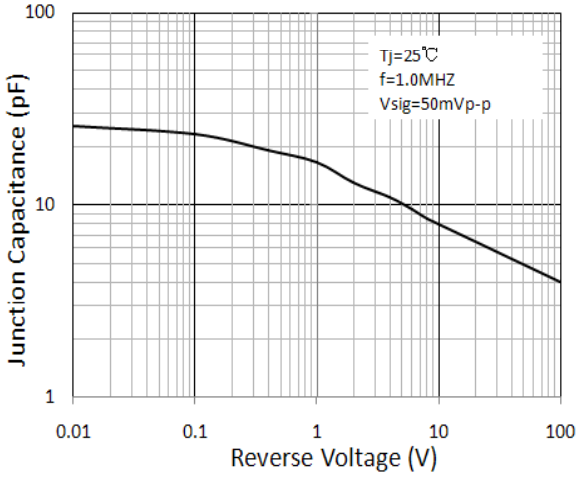
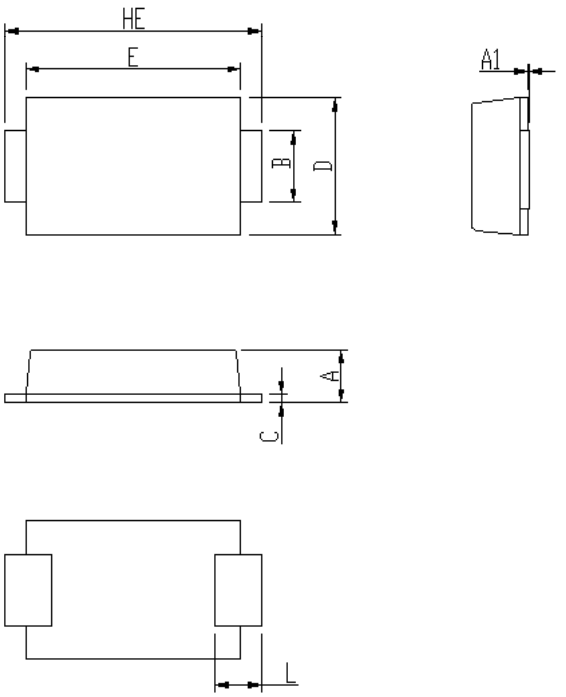


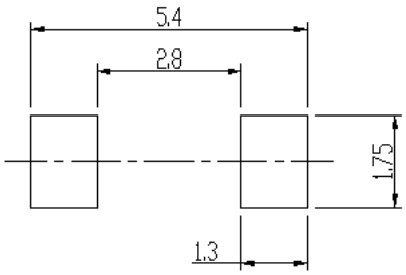
Figure 5. Typical Junction Capacitance

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

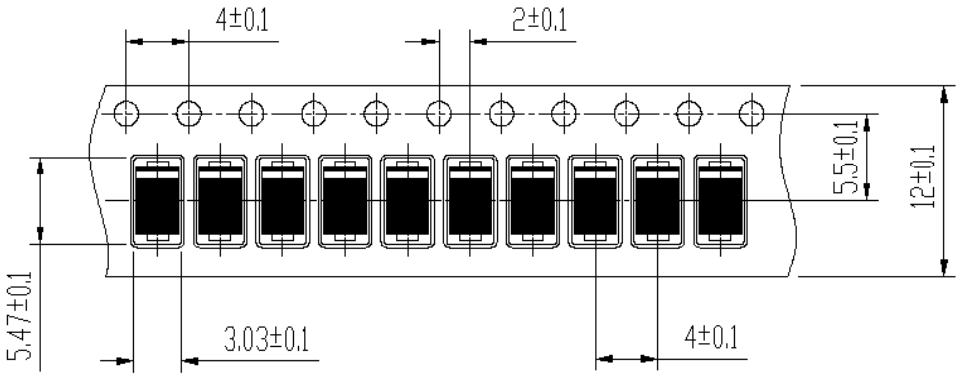


Packing Information

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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