

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





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- SL		L2F3- SL	L2F4- SL	L2F5- SL	L2F6- SL	L2F7- SL	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				Α			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60			А				
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- SL	L2F2- SL	L2F3- SL	L2F4- SL	L2F5- SL	L2F6- SL	L2F7- SL	Unit
Maximum instantaneous forward voltage	IF=2 A,TA=25℃	V <sub>F</sub>				1.3				٧
Maximum DC reverse current at rated DC blocking voltage	TA=25°C TA=125°C	I <sub>R</sub>				5 50				μA
Maximum reverse recovery time	I <sub>F</sub> =0.5A,I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A	t <sub>rr</sub>	150		250	50	00	nS		
Typical junction capacitance	4.0 V, 1 MHz	CJ	11			pF				
Typical thermal resistance <sup>1)</sup>	juntion to mount	$R_{\theta JM}$	12			°C/W				

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

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### Ratings and Characteristics Curves

#### (TA = 25°C unless otherwise noted)

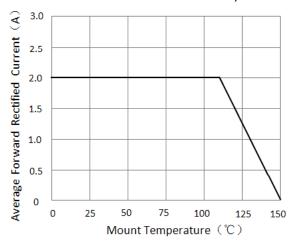


Figure 1. Forward Current Derating Curve

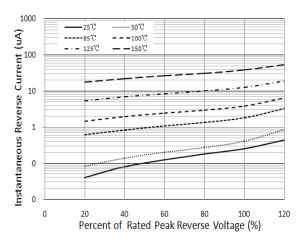


Figure 3. Typical Reverse Characteristics

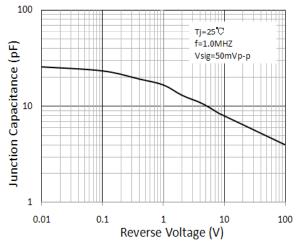


Figure 5. Typical Junction Capacitance

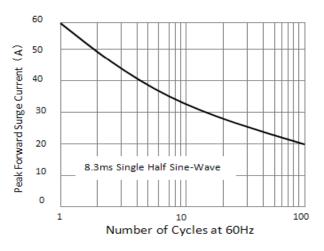


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

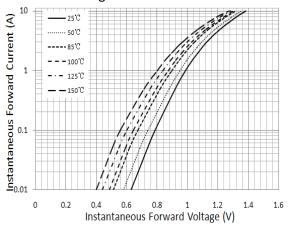


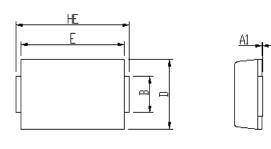
Figure 4. Typical Instantaneous Forward Characteristics

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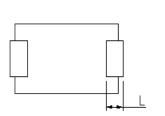
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### **Package Outline Dimensions**

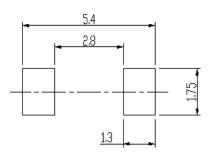


DIM	Unit: mm		Unit: inch			
	MIN	MAX	MIN	MAX		
Α	0.9	1.08	0.035	0.043		
A1	0	0.1	0.000	0.004		
В	1.25	1.45	0.049	0.057		
С	0.1	0.25	0.004	0.010		
D	2.6	2.8	0.102	0.110		
Е	4.1	4.3	0.161	0.169		
L	0.5	0.9	0.020	0.035		
HE	4.4	4.8	0.173	0.189		





Soldering footprint

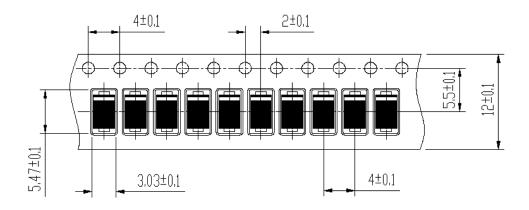


## **Packing Information**

#### 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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