

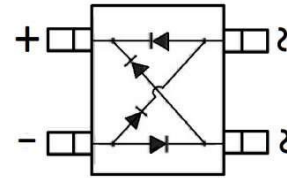
6A Fast Recovery Bridge Rectifier

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 260°C/10 seconds at terminal



MSB



Applications

- General purpose use in AC/DC bridge full wave rectification

Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbol	RMSB610	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	6.0	A
Reverse Recovery Time. $I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$	T_{rr}	500	us
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	175	A
Rating for fusing ($t=8.3\text{ms}, T_a=25^\circ\text{C}$)	I^2t	127	A^2s
Maximum instantaneous forward voltage at 3.0A	V_F	1.1	V
Maximum DC reverse current at rated DC blocking voltage	I_R	2.0 200	uA
Typical junction capacitance (Note 1)	C_J	45	pF
Typical thermal resistance	$R_{\theta JA}$	55	$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

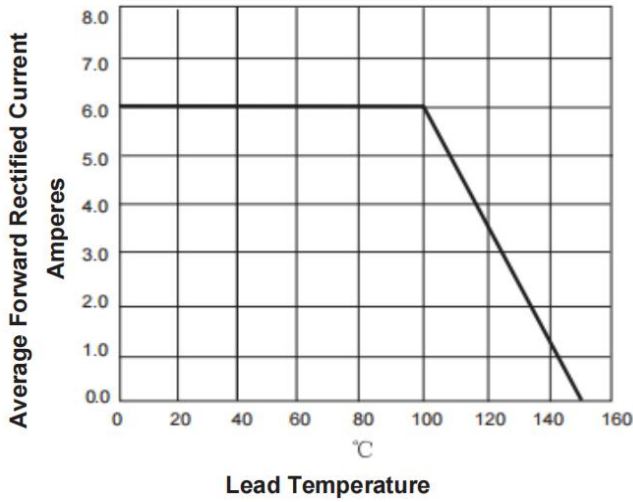


Fig. 1- Derating Curve Output Rectified Current

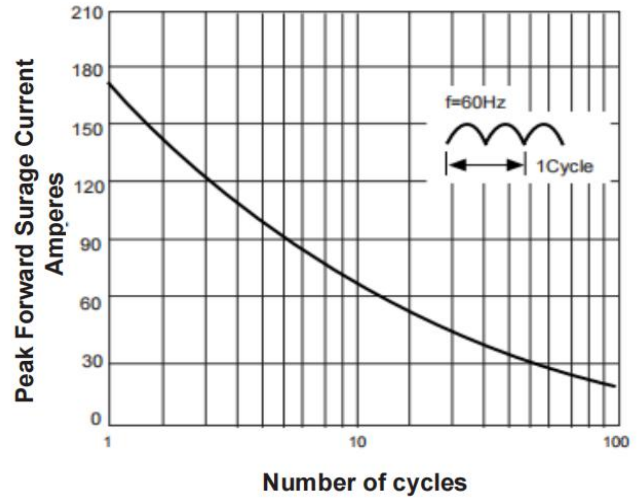


Fig. 2- Maximum Non-Repetitive Peak Forward Surge Current Per leg

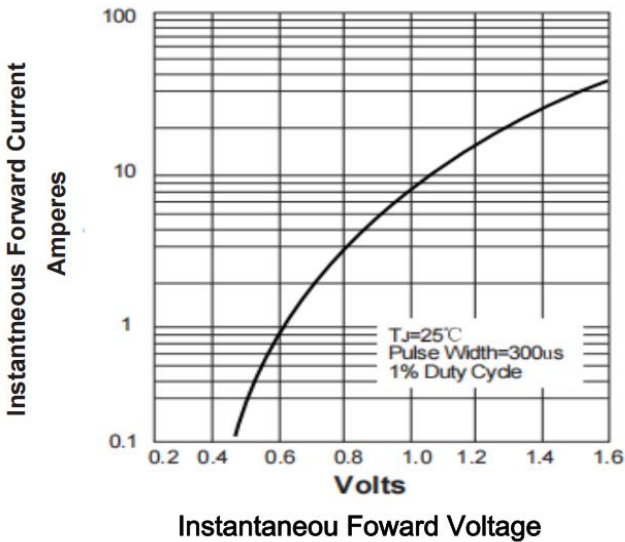


Fig. 3- Typical Forward Voltage Characteristics

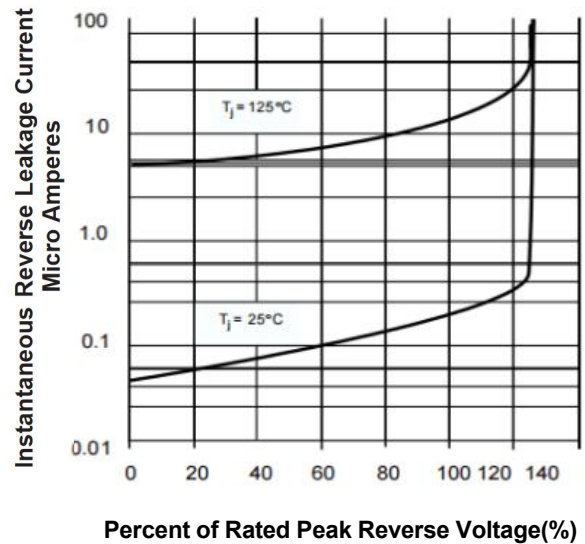
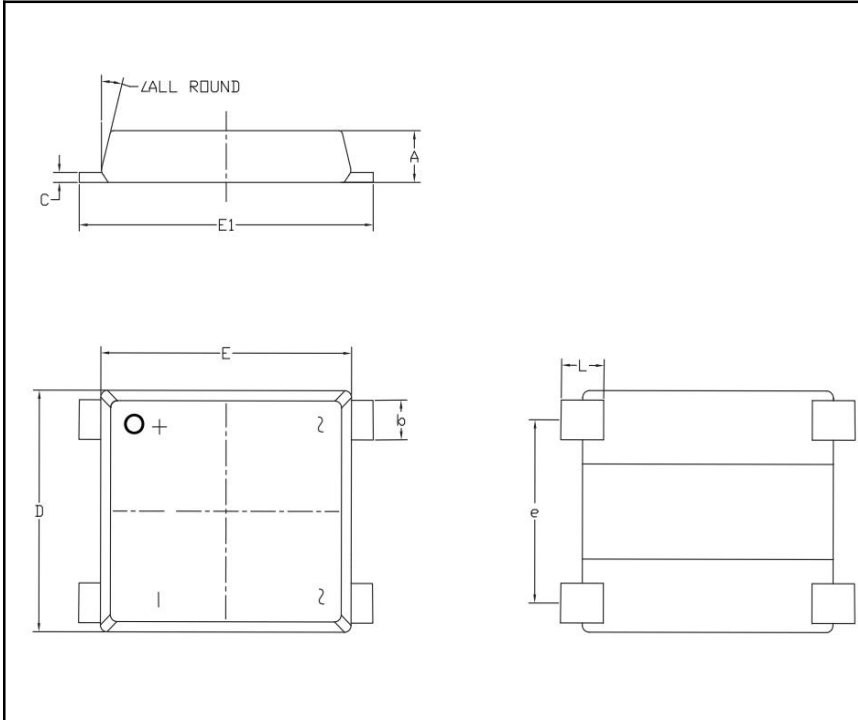


Fig. 4- Typical Reverse Leakage Characteristics

Package Outlines (Dimensions in mm)

Plastic surface mounted package(MSB)

		Dimensions				
		Symbol	Millimeters		Inches	
			Min.	Max.	Min.	Max.
A		1.3	1.5	0.051	0.059	
C		0.17	0.29	0.007	0.012	
D		6.2	7.0	0.244	0.276	
E		7.1	7.6	0.280	0.299	
E1		8.4	8.9	0.331	0.350	
L		1.0	1.6	0.032	0.055	
e		4.9	5.3	0.193	0.209	
b		0.95	1.15	0.037	0.045	

*Important Usage Information and Disclaimer

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