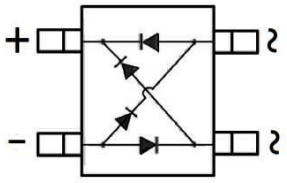
3A Fast Recovery Bridge Rectifier

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℃/10 seconds at terminal

MSB



Applications

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

Maximum Ratings and Electrical characteristics

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

Parameter		Symbol	RMSB310	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 TL=100℃		$I_{F(AV)}$	3.0	A
Reverse Recovery Time. IF=0.5A,IR=1A,IRR=0.25A		T_{rr}	350	us
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	100	A
Rating for fusing (t=8.3ms, Ta=25℃)		I^2t	41.5	A^2s
Maximum instantaneous forward voltage at 3.0A		V_F	1.1	V
Maximum DC reverse current at rated DC blocking voltage	TA=25℃ TA=125℃	I_R	2.0 200	uA
Typical junction capacitance (Note 1)		C_J	35	pF
Typical thermal resistance		$R_{\theta JA}$	25	℃/W
Operating junction and storage temperature range		T_J,T_{STG}	-55 to +150	℃

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

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

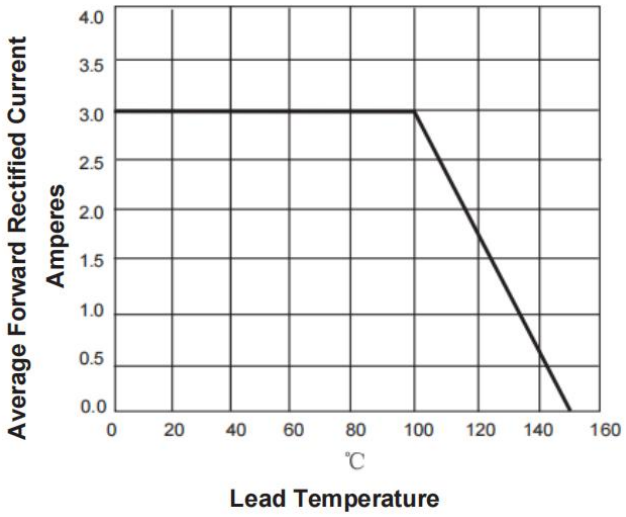


Fig. 1- Derating Curve Output Rectified Current

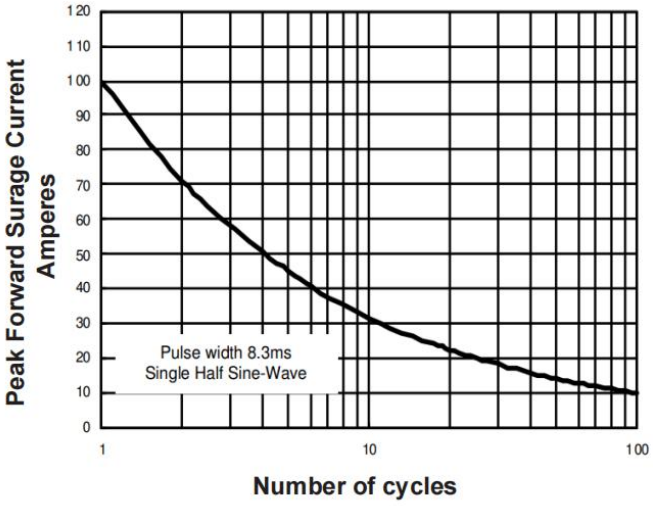


Fig. 2-Maximum Non-Repetitive Peak Forward Surge Current Per leg

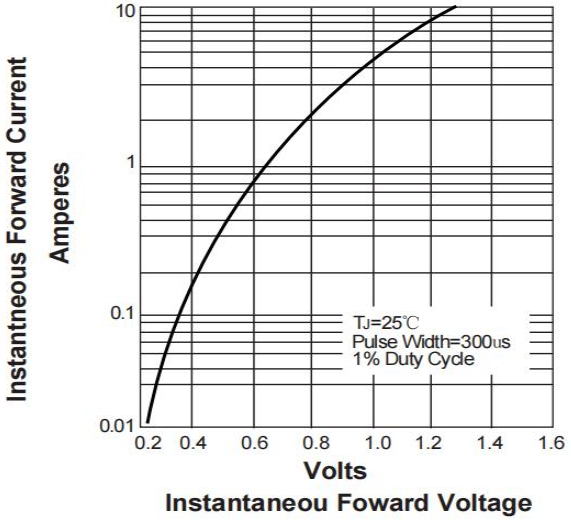


Fig. 3-Typical Forward Voltage Characteristics

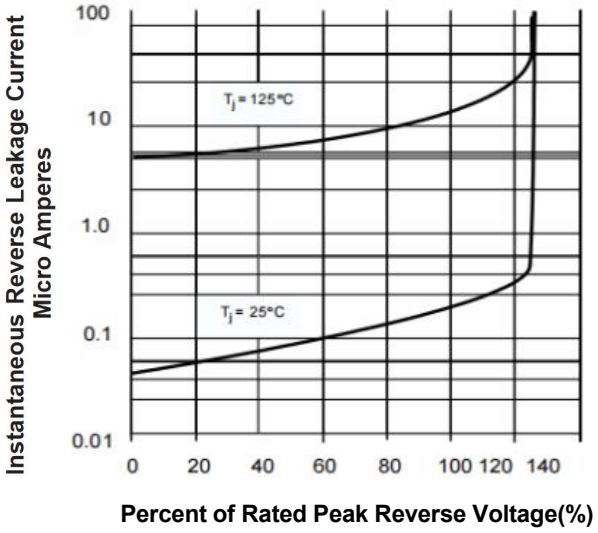
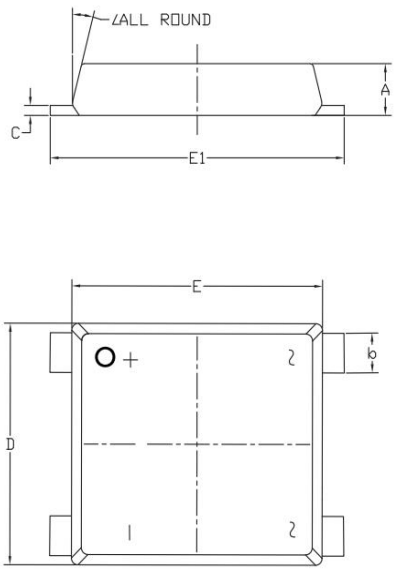


Fig. 4-Typical Reverse Leakage Characteristics

Package Outlines (Dimensions in mm)

Plastic surface mounted package(MSB)



Symbol	Dimensions			
	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

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