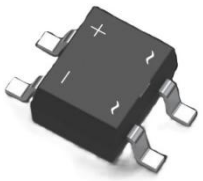
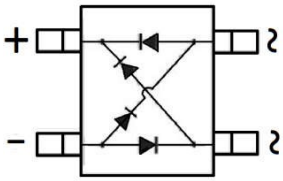
Fast Recovery Bridge Rectifier

Features

- Glass Passivated Chip Junction
- Reverse Voltage : 200 to 1000V
- Forward Current : 0.5A/0.8A
- High Surge Current Capability
- High temperature soldering : 260°C/10s at terminals



MBS



Applications

- High-frequency switching power supply
- PFC circuit

Maximum Ratings and Electrical characteristics

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

Parameter		Symbol	FMB2S	FMB4S	FMB6S	FMB8S	FMB10S	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	On glass-epoxy P.C.B.(Note1)	$I_{F(AV)}$	0.5					A
	On aluminum substrate(Note2)		0.8					
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)		I_{FSM}	30					A
Maximum Instantaneous Forward Voltage @0.4A		V_F	1.3					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5.0					μA
	T_A=125℃		100					
Maximum Reverse Recovery Time T=25℃(Note 3)		T_{RR}	150		250	500		nS
Typical Junction Capacitance(Note 1)		C_J	25					pF
Typical Thermal Resistance(Note 2)		$R_{\theta JA}$	28					°C/ W
		$R_{\theta JC}$	85					
Operating Junction Temperature Range		T_J, T_{stG}	(-55 to+150)					°C

Notes:
1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads.
2. On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad.
3. Thermal resistance form junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.
4. Reverse recovery condition IF=0.5A,IR=1.0A,Irr=0.25A.

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

FIG.1 - Typical forward current derating curve

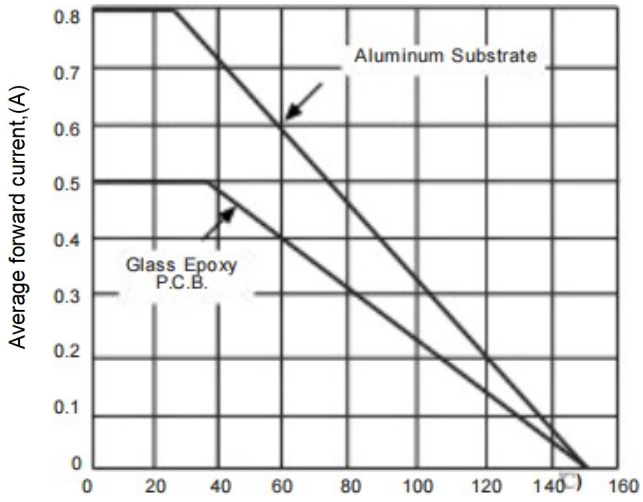


FIG.2 - Maximum non-repetitive peak forward surge current

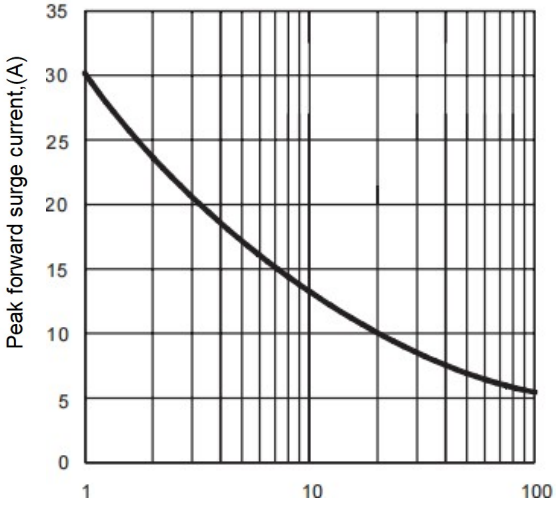


FIG.3 - Typical instantaneous forward forward characteristics

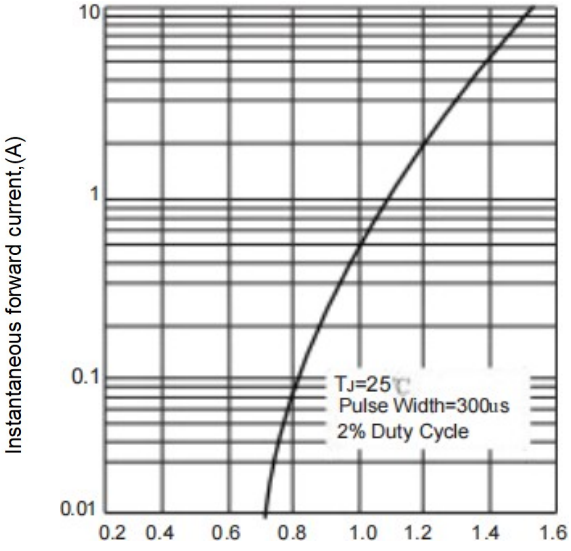
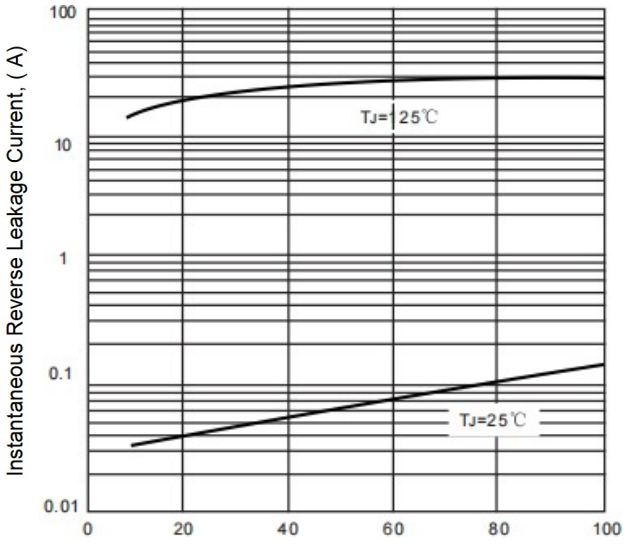
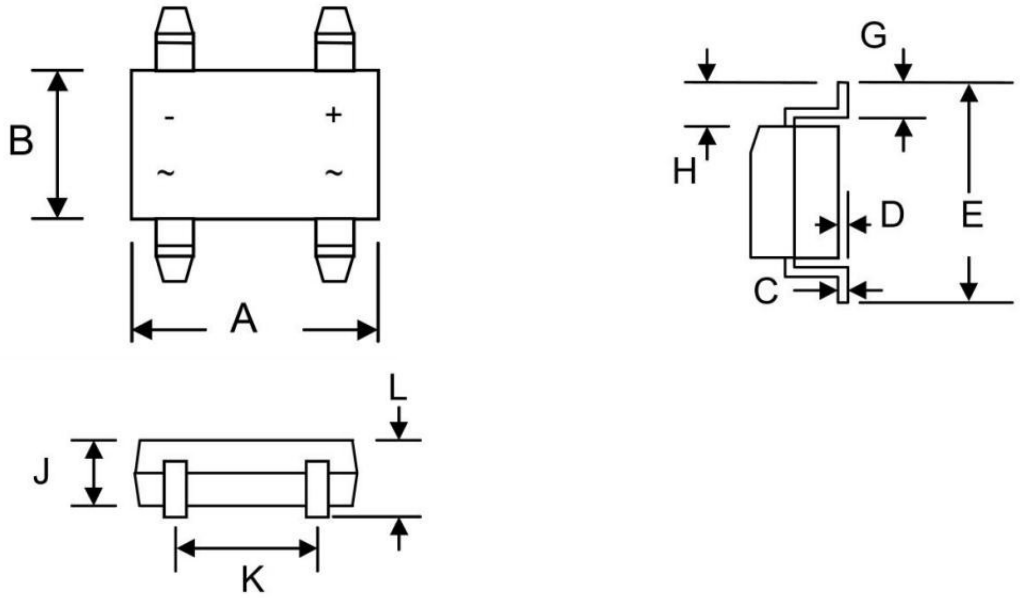


FIG.4 - Typical reverse characteristics



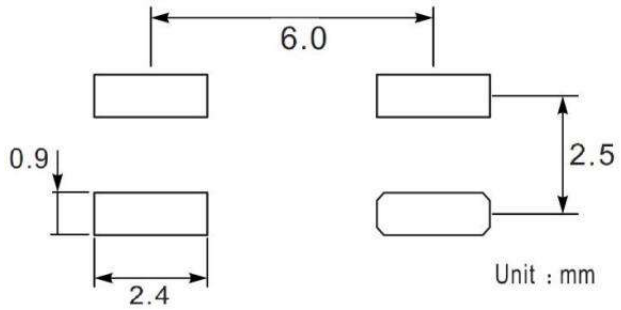
Package Outlines (Dimensions in mm)

Plastic surface mounted package(MBS)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.90	0.177	0.193
B	3.80	4.20	0.150	0.165
C	0.15	0.35	0.006	0.014
D	------	0.20	____	0.008
E	------	7.00	____	0.276
G	0.70	1.10	0.028	0.043
H	1.30	1.70	0.051	0.067
J	2.30	2.70	0.091	0.106
K	2.30	2.70	0.091	0.106
L	____	3.00	____	0.118

The recommended mounting pad size



Note:

1.Controlling dimension: in millimeters

2.General tolerance: ±0.05mm

3.The pad layout is for reference purposes only

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