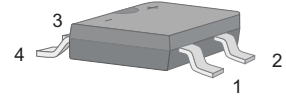


## 0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 0.8A
- High Surge Current Capability
- Designed for Surface Mount Application



MBF Package

### PINNING

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )

### MECHANICAL DATA

- Case: MBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 75mg 0.0024oz

### Maximum Ratings and Electrical characteristics

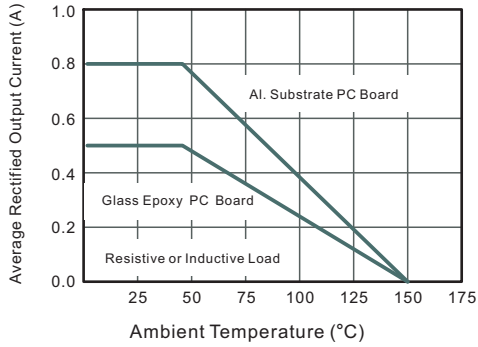
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_a = 40\text{ }^\circ\text{C}$	$I_O$	0.8						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	25						A
Maximum Forward Voltage at 1 A @ $I_F=0.4\text{A}$ @ $I_F=0.8\text{A}$	$V_F$	1.0 1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25\text{ }^\circ\text{C}$ @ $T_A=100\text{ }^\circ\text{C}$ @ $T_A=125\text{ }^\circ\text{C}$	$I_R$	5.0 100 500						$\mu\text{A}$
Typical Junction Capacitance ( Note1 )	$C_j$	13						pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JL}$	60 16						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^\circ\text{C}$

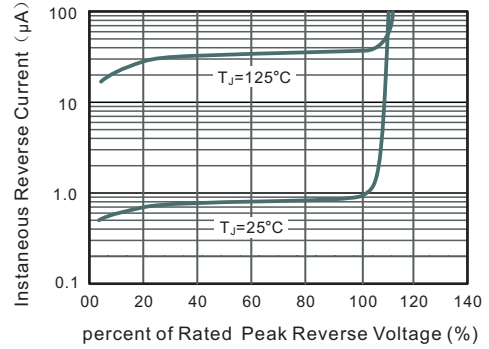
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> copper pad.

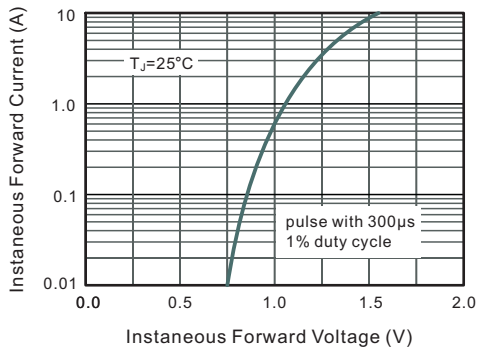
**Fig.1 Average Rectified Output Current Derating Curve**



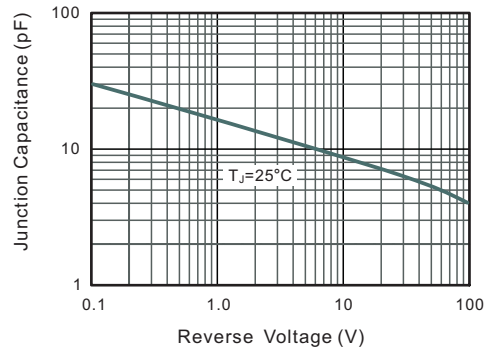
**Fig.2 Typical Reverse Characteristics**



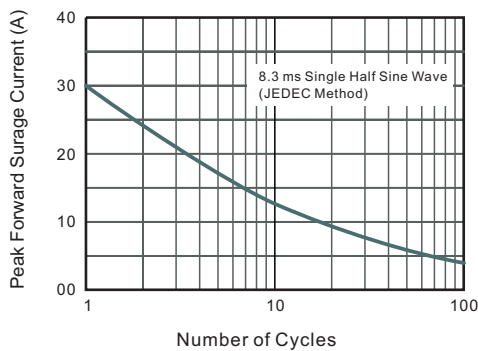
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



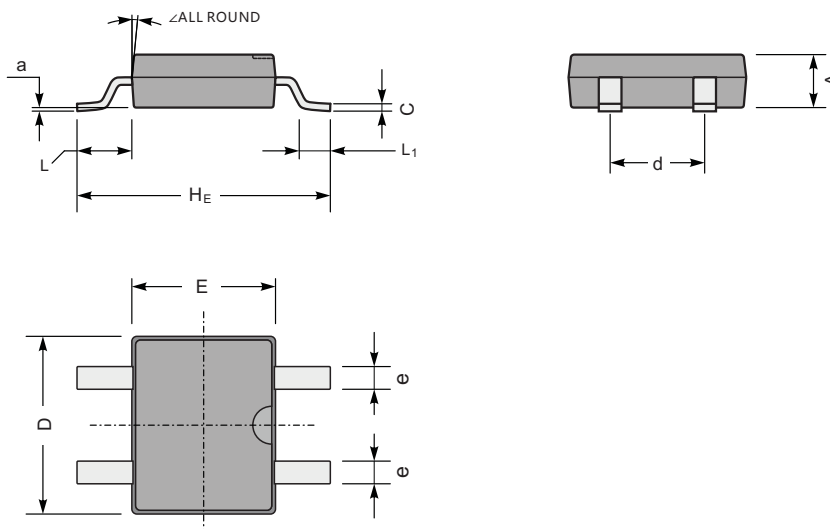
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

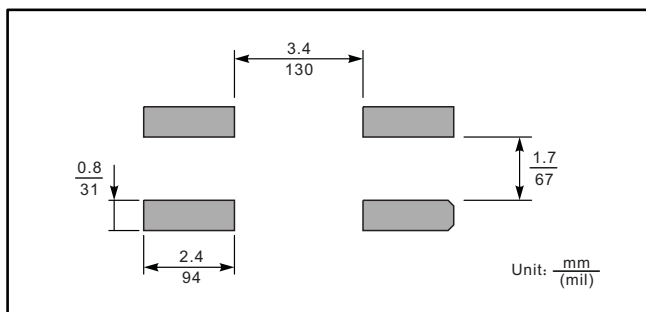
MBF



MBF mechanical data

UNIT		A	C	D	E	HE	d	e	L	L <sub>1</sub>	a	∠
mm	max	1.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	7°
	min	1.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	63	8.7	197	161	276	106	28	67	43	8	
	min	47	5.9	177	142	252	91	20	51	20	—	

### The recommended mounting pad size



### Marking

Type number	Marking code
MB1F	MB1F
MB2F	MB2F
MB4F	MB4F
MB6F	MB6F
MB8F	MB8F
MB10F	MB10F

