MB1F THRU MB10F

0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

- Glass Passivated Chip Juntion
- Reverse Voltage - 50 to 1000 V
- Forward Current - 0.8 A
- High Surge Current Capability
- Designed for Surface Mount Application

PINNING

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

MBF Package

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 Ta = 40 °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
Forward Voltage per element @I_F= 0.4A @I_F=0.8A	V_F	1.0 1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_A=25 °C @T_A=100°C @T_A=125 °C	I_R	5.0 100 500						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JL}$	60 16						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C. 2. Mounted on glass epoxy PC board with 1.3mm2 copper pad.

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Fig.1 Average Rectified Output Current Derating Curve

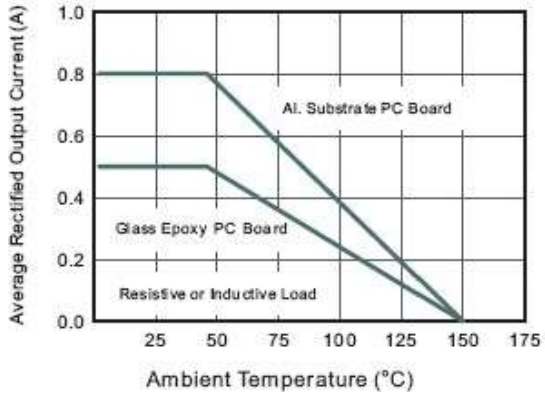


Fig.2 Typical Reverse Characteristics

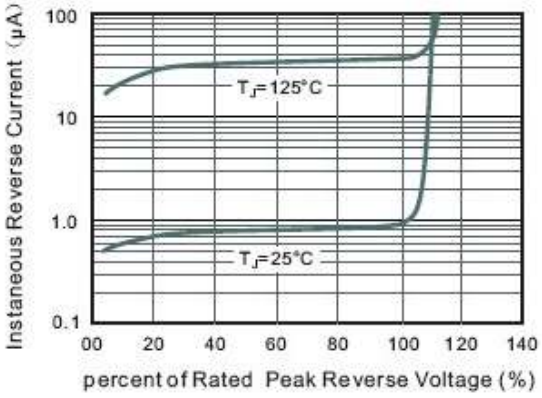


Fig.3 Typical Instaneous Forward Characteristics

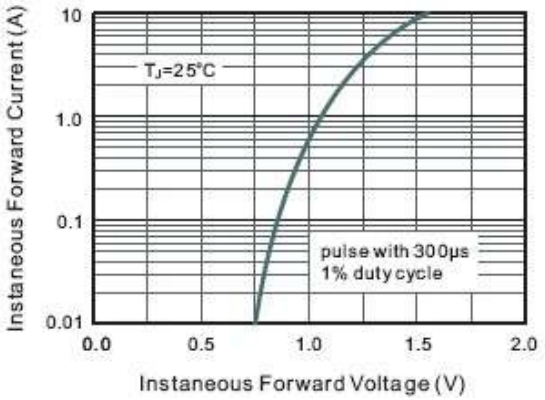


Fig.4 Typical Junction Capacitance

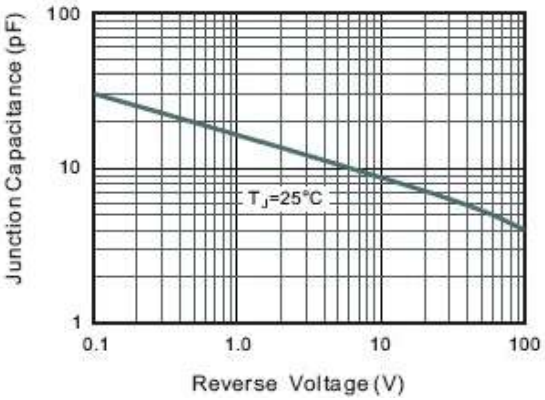
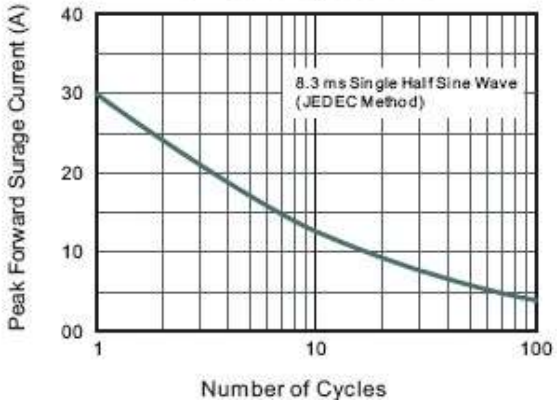
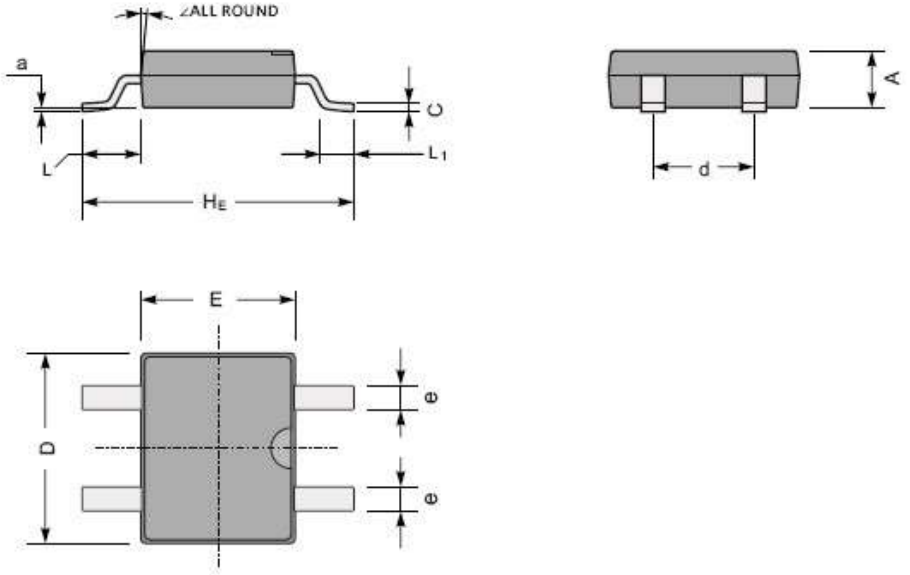


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE

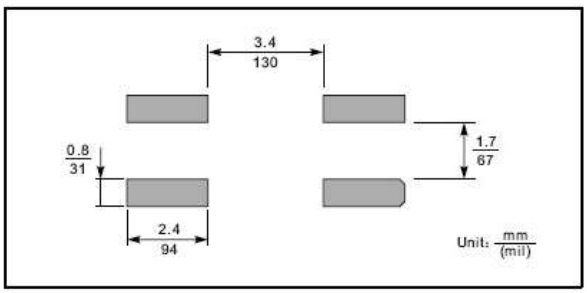
Plastic surface mounted package; 4 leads MBF



MBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	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