

MB1F~MB10F

ROHS

Surface Mount Glass Passivated Bridge Rectifiers

Features

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

Mechanical Data

- ◆ Case: MBF
- ◆ Quantity Per Reel : 5,000pcs
- ◆ Approx. Weight : 75mg /0.0026oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

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%.

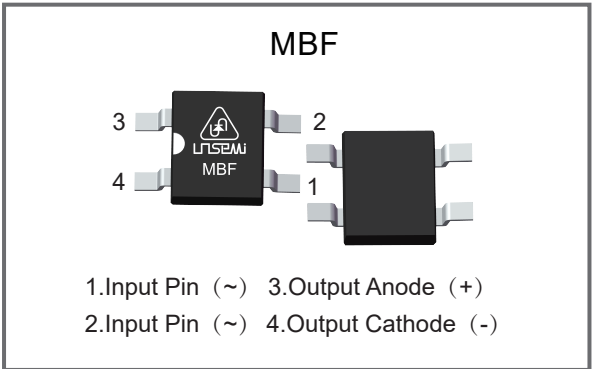
Parameter		Symbol	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum Repetitive Peak Reverse Voltage		VRRM	100	200	400	600	800	1000	V
Maximum RMS Voltage		VRMS	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		VDC	100	200	400	600	800	1000	V
Average Rectified Output Current at Tc=125°C		Io	0.8						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load		IFSM	30						A
Forward Voltage Per Element at IF=0.8A		VF	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25°C	IR	5.0						μA
	Ta=125°C	IR	40						
Typical Junction Capacitance ⁽¹⁾		Cj	13						pF
Typical Thermal Resistance ⁽²⁾		RθJA	90						°C/W
		RθJC	30						
Operating and Storage Temperature Range		TJ,Tstg	-55 ~ +150						°C

Note: (1) Measured at 1MHz and applied reverse voltage of 4VDC.

(2) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81cm) copper pad.



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Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

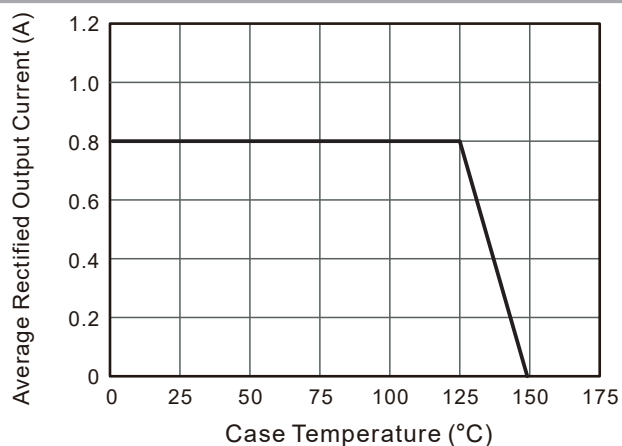


Fig. 2 Typical Reverse Characteristics

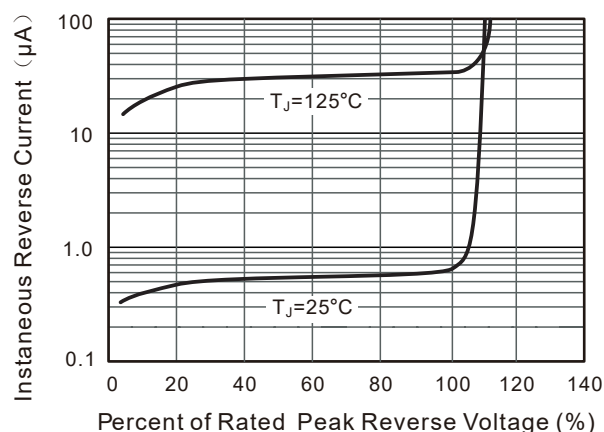


Fig.3 Typical Instaneous Forward Characteristics

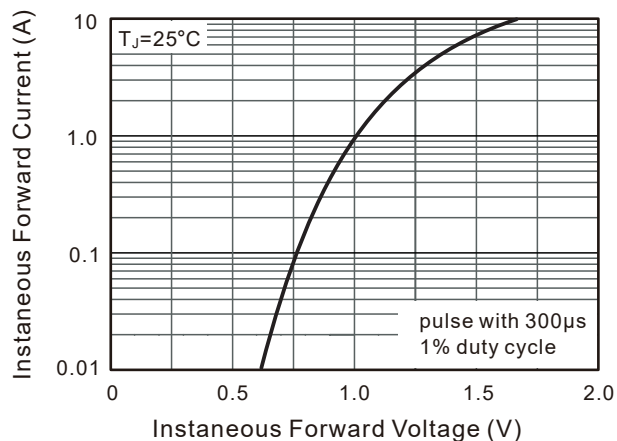


Fig. 4 Typical Junction Capacitance

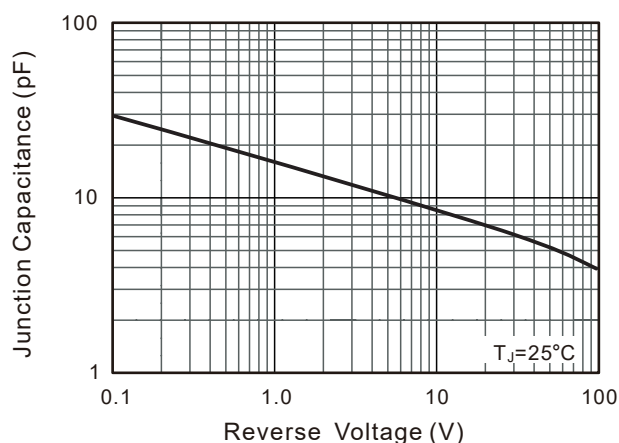
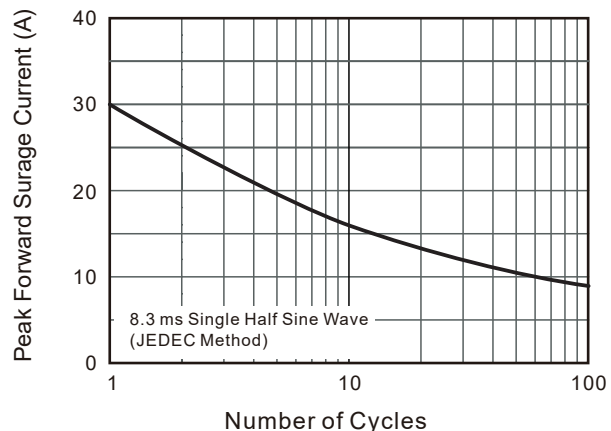
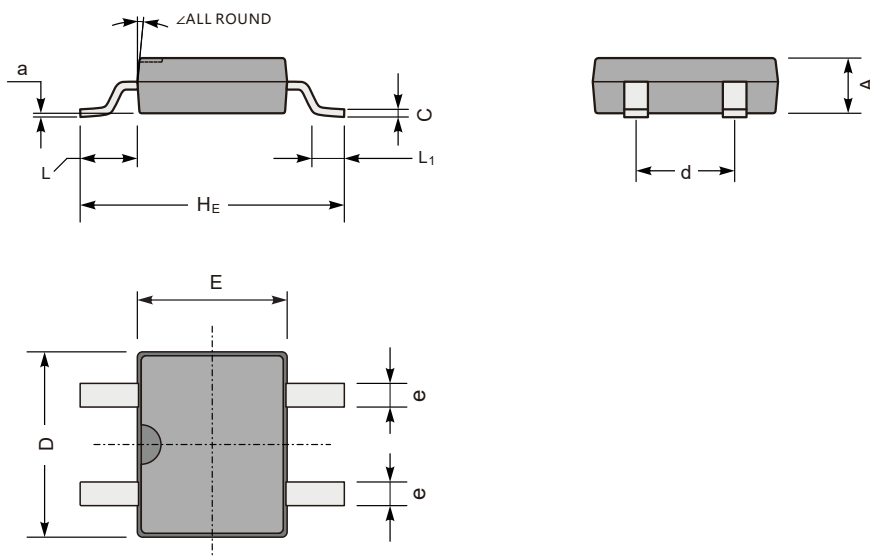


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline & Dimensions



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	0.8	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	31	67	43	8	
	min	47	5.9	177	142	252	91	20	51	20	—	

Marking

Type Number	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F
Making	MB1F	MB2F	MB4F	MBI6F	MB8F	MB10F

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