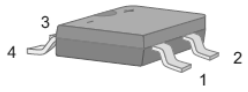
MB1F THRU MB10F

Surface Mount Glass Passivated Bridge Rectifier
Reverse Voltage - 50 to 1000 V
Forward Current - 1 A

PINNING

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



MBF Package

Features

- Glass passivated chip junction
- Hight Surge Current Capability
- Designed for Surface Mount Application

Mechanical Data

- Case: Molded plastic, MBF
- Terminals: solderable per MIL-STD-750,Method 2026

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Maximum Recurrent 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°C	$I_{F(AV)}$	1						A
Peak Forward Surge Current 8.3 ms Single Half-sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30						A
Maximum Forward Voltage at 1 A	V_F	1						V
Maximum DC Reverse Current at T_a = 25°C at Rated DC Blocking Voltage at T_a = 125°C	I_R	5 100						μA
Typical Junction Capacitance [1]	C_J	13						pF
Typical Thermal Resistance [2]	$R_{\theta JA}$ $R_{\theta JL}$	60 16						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150						°C

[1] Measured at 1 MHz and applied reverse voltage of 4 V

[2] On glass epoxy P.C.B. mounted on 0.05" X 0.05" (1.3 X1.3 mm) pads

Fig.1 Average Rectified Output Current Derating Curve

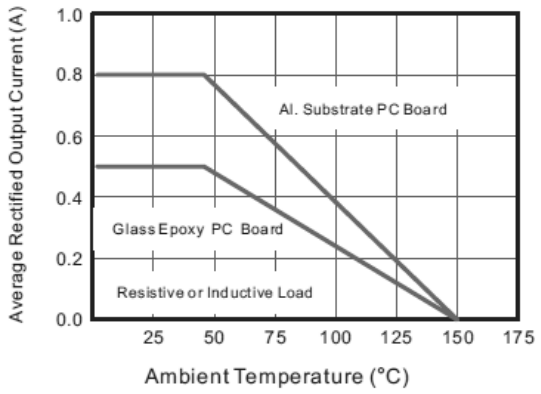


Fig.2 Typical Reverse Characteristics

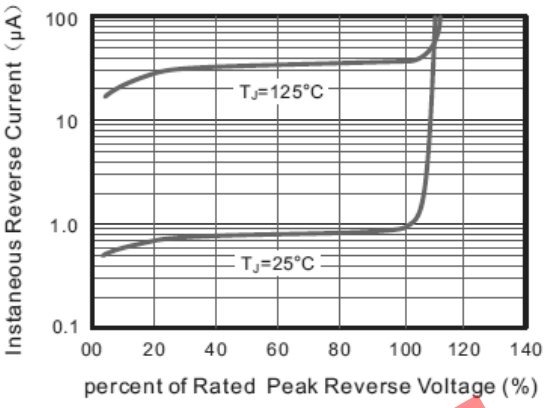


Fig.3 Typical Instaneous Forward Characteristics

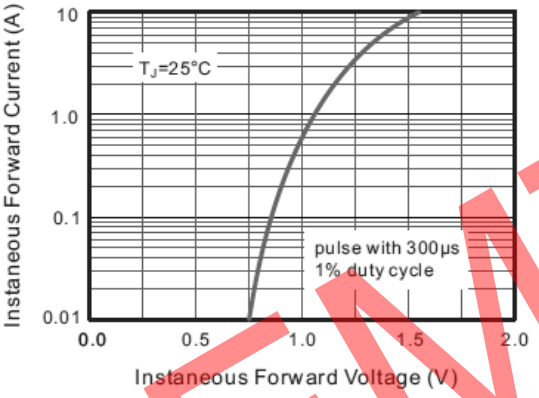


Fig.4 Typical Junction Capacitance

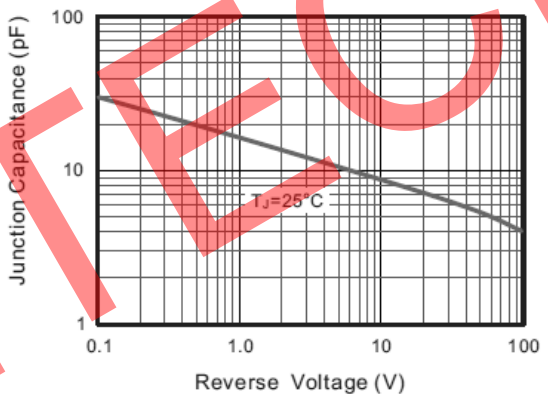
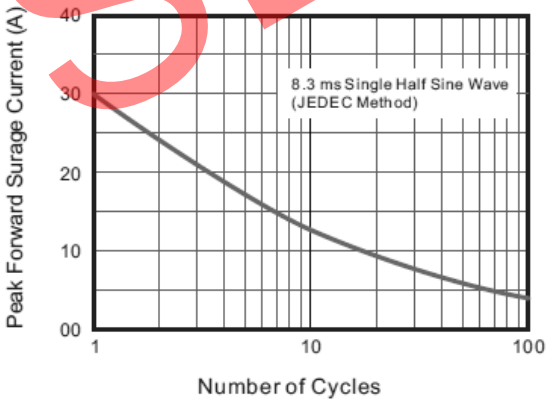


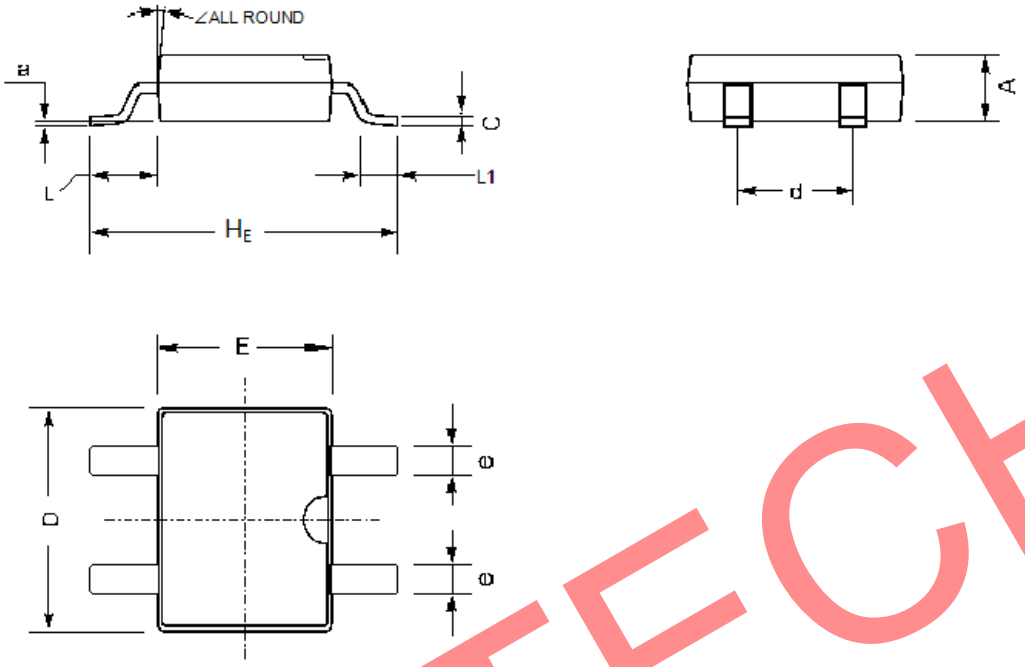
Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE

MBF

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	H_E	d	e	L	L1	a	∠
mm	1.45	0.22	4.75	4.00	6.85	2.65	0.80	1.70	1.10	0.15	7°
	1.30	0.18	4.45	3.50	6.55	2.35	0.60	1.30	0.85	0.00	

RECOMMENDED SOLDERING FOOTPRINT