

1A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

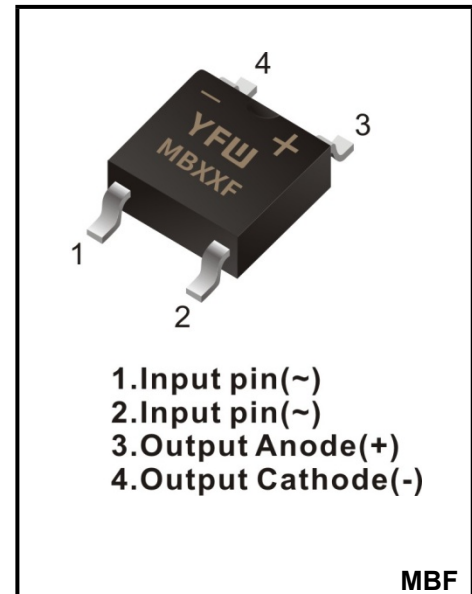
Forward Current - 1A

FEATURES

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: MBF
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 75mg / 0.0026oz



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 $T_c = 125\text{ }^{\circ}\text{C}$	I_o	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	35						A
Forward Voltage per element at 1.0A	V_F	1.1						V
Maximum DC Reverse Current @ $T_A=25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^{\circ}\text{C}$	I_R	5 40						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}, R_{\theta JC}$	80/25						$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^{\circ}\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

Fig.1 Average Rectified Output Current Derating Curve

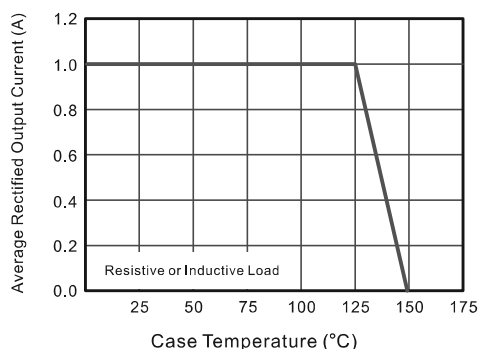


Fig.2 Typical Reverse Characteristics

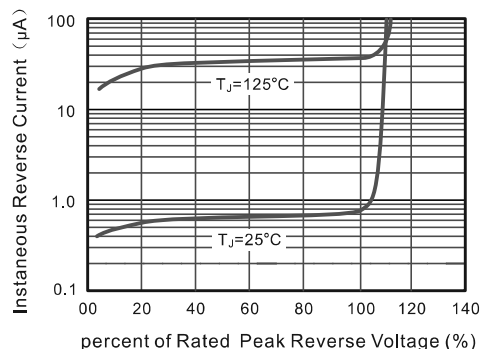


Fig.3 Typical Instantaneous Forward Characteristics

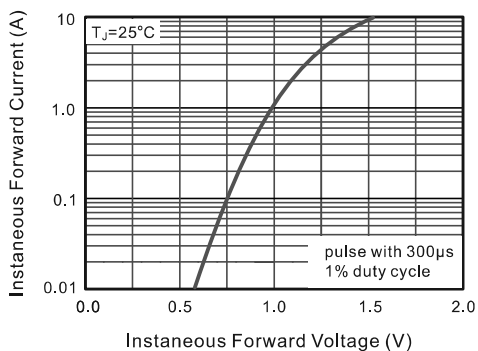


Fig.4 Typical Junction Capacitance

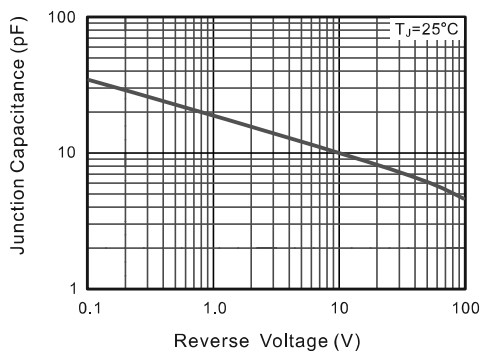
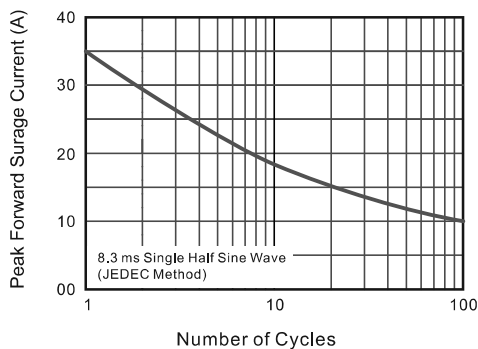
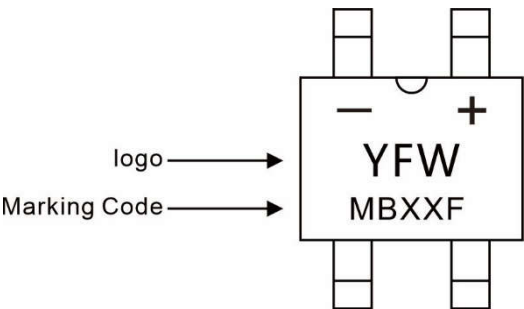


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

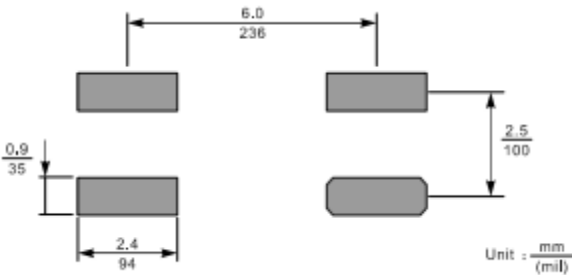
Package	Packing Description	Packing Quantity
MBF	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

MBF

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.2	1.6	51	59
C	0.15	0.22	5.9	8.7
D	4.5	5.0	193	205
E	3.6	4.1	166	177
HE	6.4	7.0	236	252
d	2.3	2.7	150	165
e	0.5	0.8	20	28
L	1.3	1.7	51	57
L1	0.5	1.1	20	43
a	/	0.2	/	8
∠	7°			

The recommended mounting pad size



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