

3A SURFACE MOUNT SCHOTTKY BRIDGE

RECTIFIER Reverse Voltage - 40 to 200 V

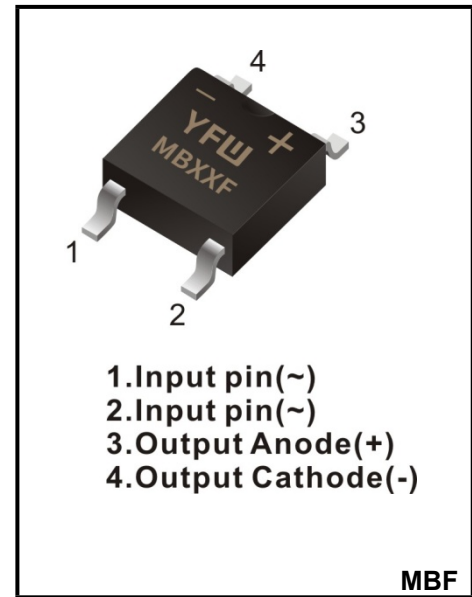
Forward Current - 3A

FEATURES

- ◆High current capability
- ◆Low forward voltage drop
- ◆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: 88mg /0.0031oz



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	MB34F	MB36F	MB38F	MB310F	MB320F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	80	100	200	V
Maximum RMS voltage	V_{RMS}	28	42	56	70	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	80	100	200	V
Average Rectified Output Current	$I_{F(AV)}$	3					A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	80		70			A
Max Instantaneous Forward Voltage at 3 A	V_F	0.55	0.70	0.85		0.95	V
Maximum DC Reverse Current @ $T_A=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A=100^{\circ}C$	I_R	0.5 10	0.3 5				μA
Typical Junction Capacitance (Note1)	C_j	220	160			100	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	65					$^{\circ}C/W$
Operating and Storage Temperature Range	T_j	-55 ~ +150					$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150					$^{\circ}C$

(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 Forward Current Derating Curve

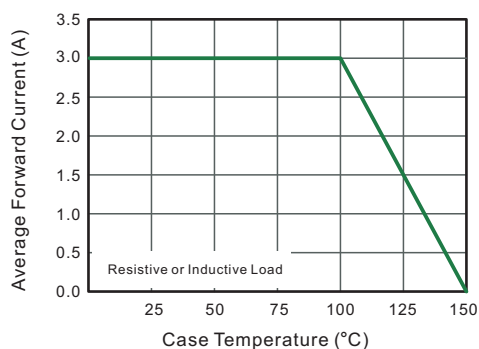


Fig.2 Typical Reverse Characteristics

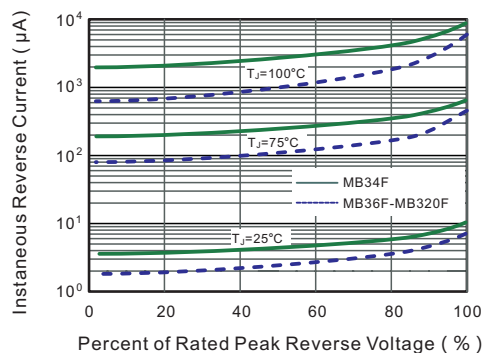


Fig.3 Typical Forward Characteristic

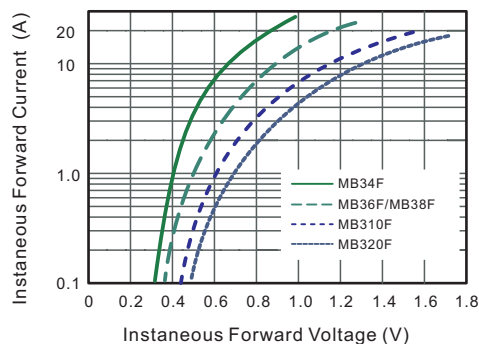


Fig.4 Typical Junction Capacitance

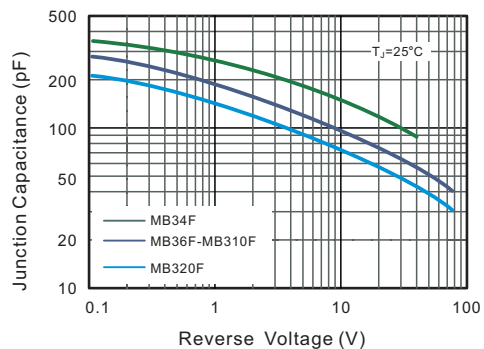


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

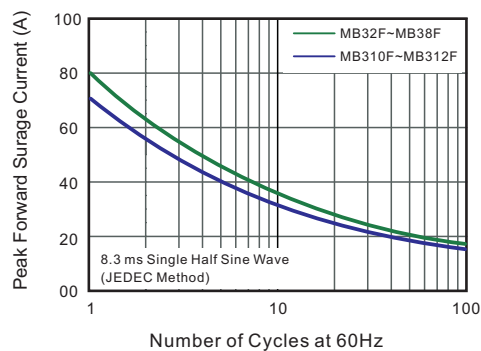
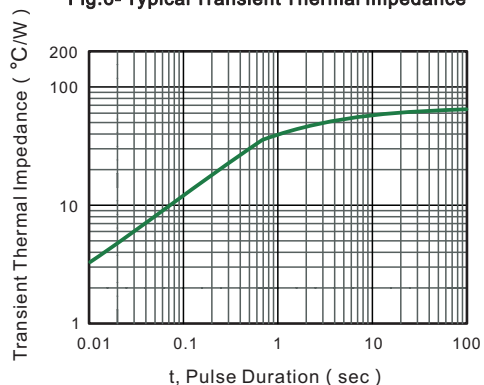
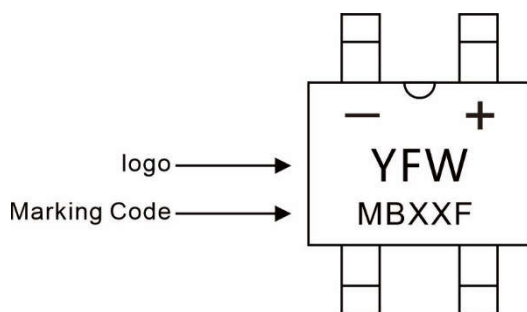


Fig.6- Typical Transient Thermal Impedance



Marking Diagram



Ordering information

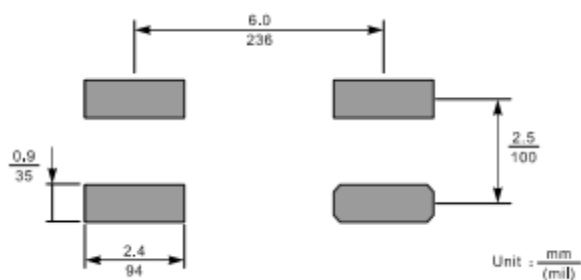
Package	Packing Description	Packing Quantity
MBF	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

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



Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.