

### 3A SURFACE MOUNT SCHOTTKY BRIDGE

**RECTIFIER Reverse Voltage - 40 to 200 V**

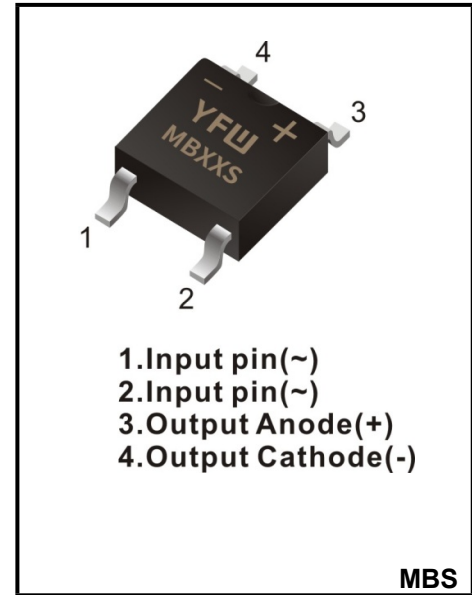
**Forward Current - 3A**

#### 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: MBS
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 100mg /0.0035oz



#### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

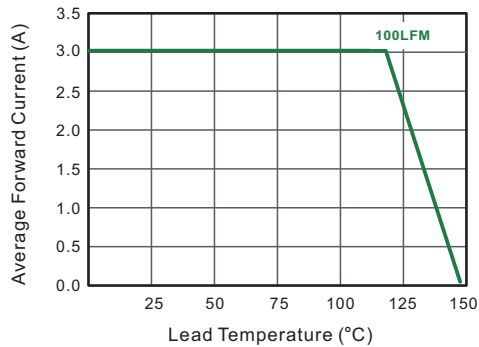
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB34S	MB36S	MB38S	MB310S	MB320S	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				$\mu A$
Typical Junction Capacitance (Note1)	$C_j$	250	160				pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	60					$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j$	-55 ~ +150					$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-55 ~ +150					$^{\circ}C$

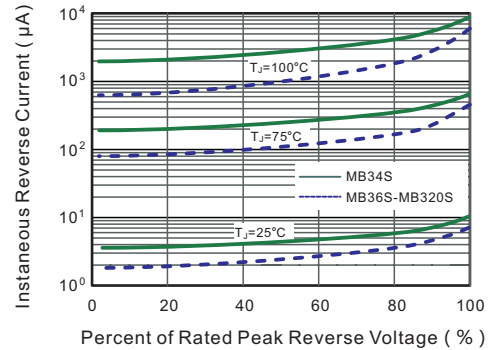
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

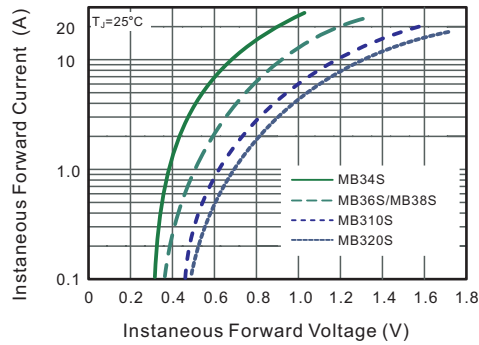
**Fig.1 Forward Current Derating Curve**



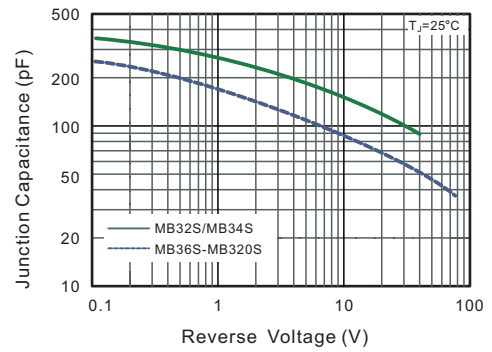
**Fig.2 Typical Reverse Characteristics**



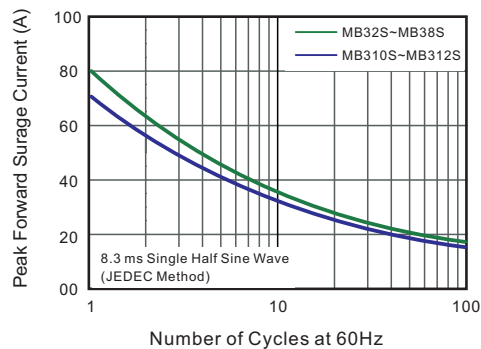
**Fig.3 Typical Forward Characteristic**



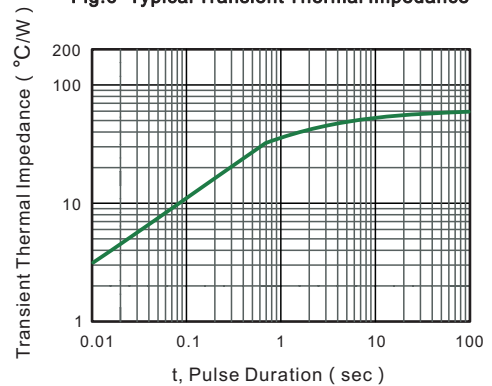
**Fig.4 Typical Junction Capacitance**



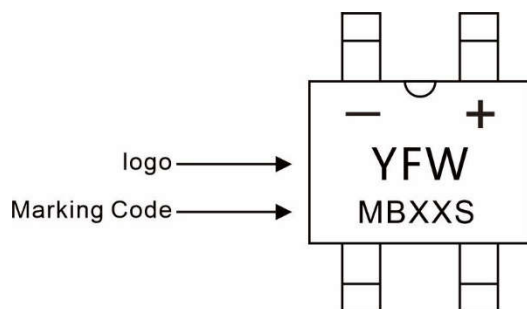
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**



## Marking Diagram



## Ordering information

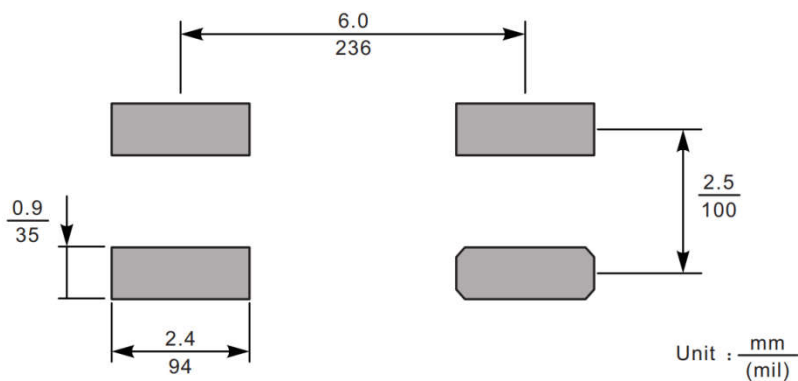
Package	Packing Description	Packing Quantity
MBS	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

## Package Dimensions

### MBS

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	2.2	2.6	94	102
C	0.15	0.22	5.9	8.7
D	4.5	5.0	177	197
E	3.6	4.1	142	161
HE	6.4	7.0	252	276
d	2.3	2.7	91	106
e	0.5	0.7	20	28
L	1.3	1.7	51	67
L1	0.5	1.1	20	43
a	/	0.2	/	8
∠	7°			

### The recommended mounting pad size



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