

## MB6S THRU MB10S

### SINGLE-PHASE 0.8AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

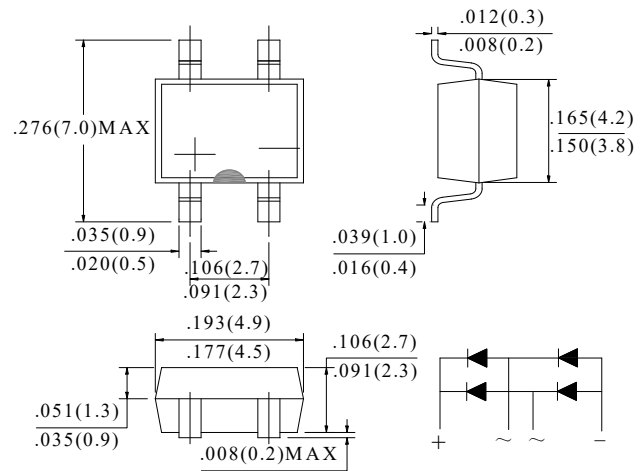
#### FEATURES

- . High surge current capability
- . Ideal for printed circuit board
- . Good for printed circuit board
- . Reliable low cost construction utilizing molded plastic technique
- . Small size , simple installation
- . High temperature soldering guaranteed:  
260°C/10 seconds at terminals.

#### MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL 94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity: Symbols molded or marked on body
- . Mounting position: Any

#### MBS



Dimensions in inches and (millimeters)

### 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, derate current by 20%

Type Number	SYM BOL	MB6S	MB8S	MB10S	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	600	800	1000	V
Maximum Average Forward rectified Current	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	30			A
Maximum Forward Voltage Drop per element at 0.4A DC	$V_F$	0.95			V
Maximum DC Reverse Curren @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$	5.0 100.0			$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	3.74			$\text{A}^2\text{Sec}$
Typical Junction Capacitance Per Leg(Note1)	$C_J$	10			pF
Typical Thermal Resistance Per Leg(Note2)	$R_{(JA)}$	70			$^\circ\text{C}/\text{W}$
Storage Temperature	$T_{STG}$	-55 to +150			$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-55 to +150			$^\circ\text{C}$

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient mounted on P.C.B with 0.2×0.2" (5×5mm) copper pads

**RATING AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

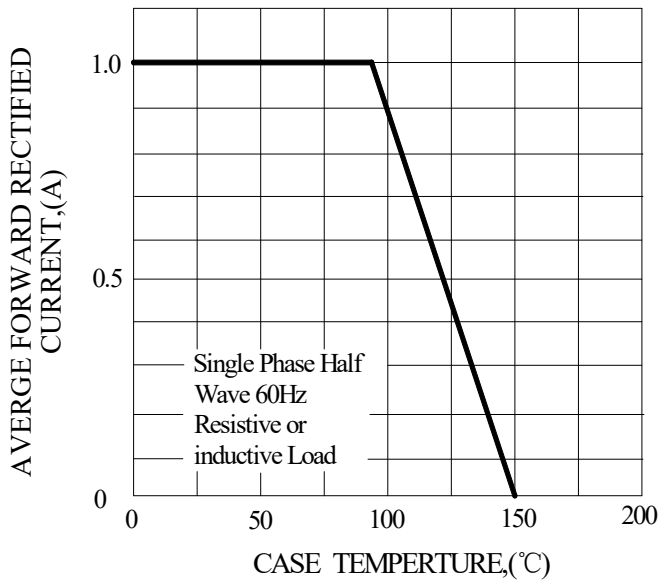


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

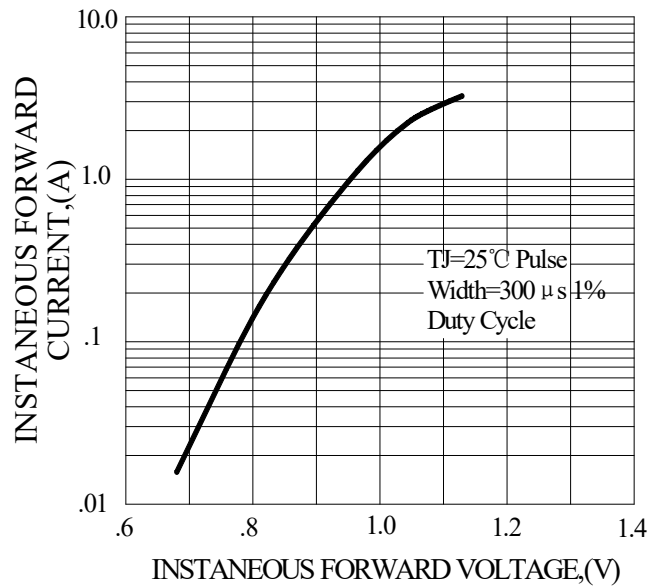


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

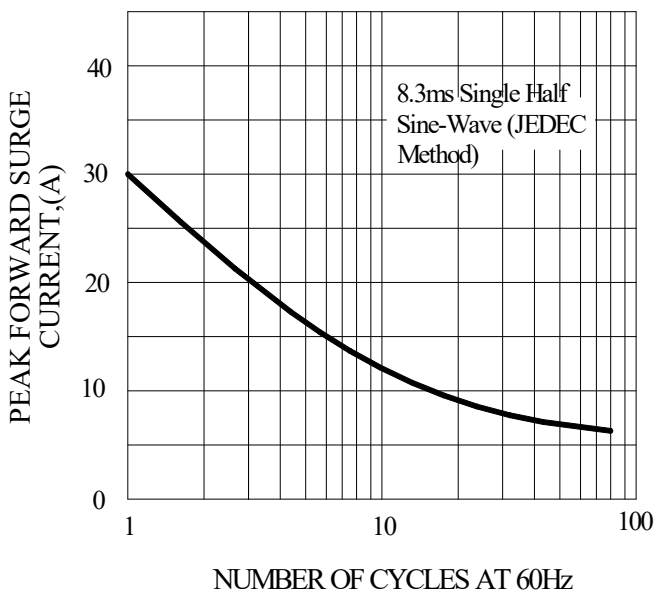
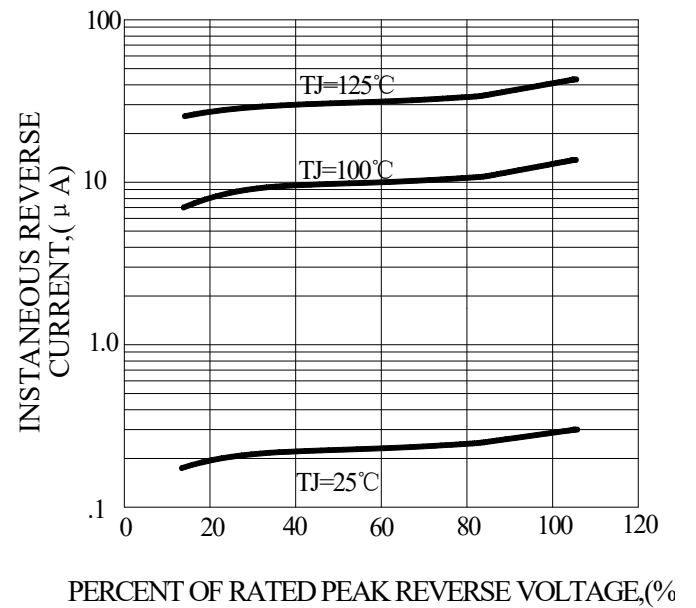
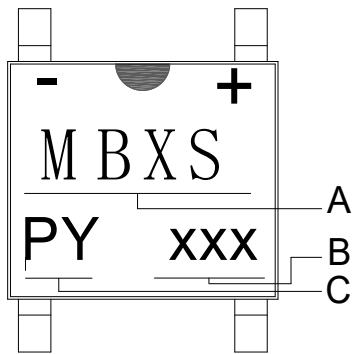


FIG.4-TYPICAL REVERSE CHARACTERISTICS



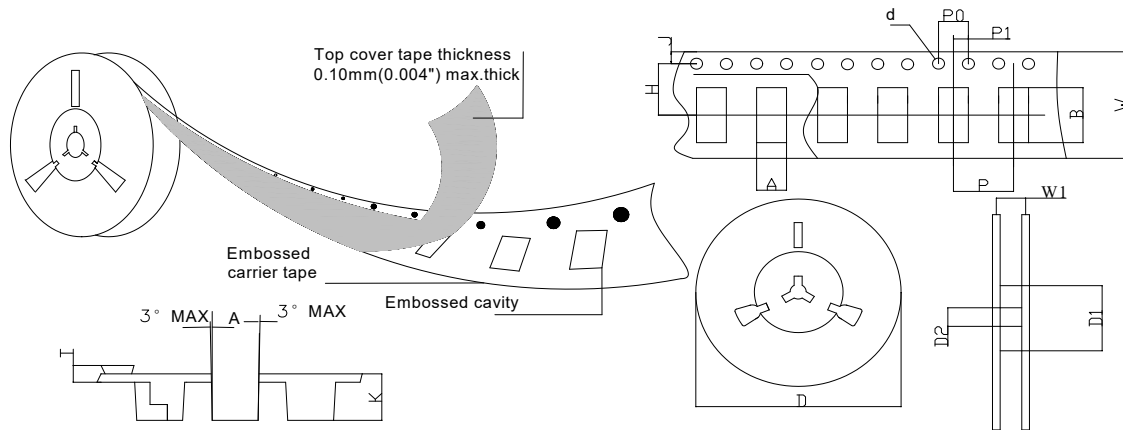
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Product Name
B	Date Code
C	Trademark

### 2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	MBS	ITEM	SYM BOL	MBS
Carrier width	A	5.15(0.203)Max	Carrier depth	K	2.88(0.113)Typ
Carrier length	B	7.25(0.285)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	∅1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(2.913)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.50(0.217)Typ			