

## 2.0A Single Phase Glass passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 2.0A

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals

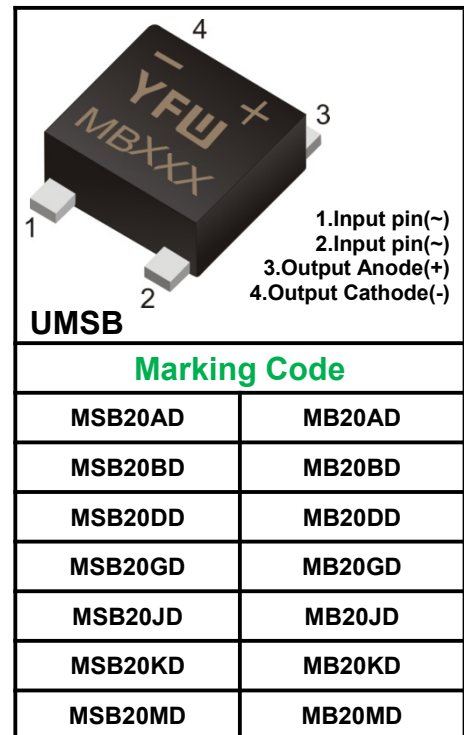
### MECHANICAL DATA

- ◆ Case: UMSB
- ◆ Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ◆ Polarity : Polarity symbol marking on body
- ◆ Mounting Position : Any

### 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 %.

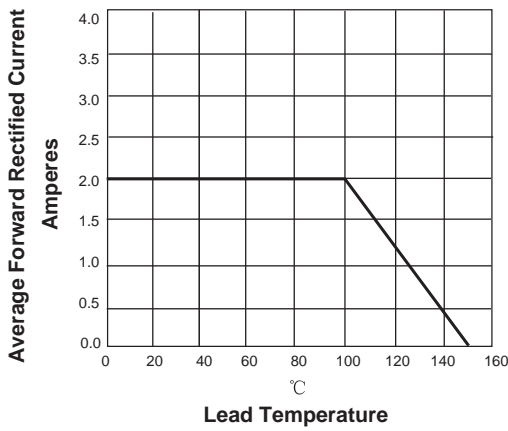


Parameter	Symbols	MSB 20AD	MSB 20BD	MSB 20DD	MSB 20GD	MSB 20JD	MSB 20KD	MSB 20MD	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	100	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ C$	$I_{(AV)}$	2.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50							A
Maximum instantaneous forward voltage at 2.0A	$V_F$	1.10							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0 500							$\mu A$
Typical Junction Capacitance(Note 1)	$C_j$	30							pF
Typical thermal resistance	$R_{qJA}$	55.0							$^\circ C/W$
Rating for fusing (t=8.3ms, Ta=25 °C)	$I^2t$	10.3							A <sup>2</sup> S
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150							$^\circ C$

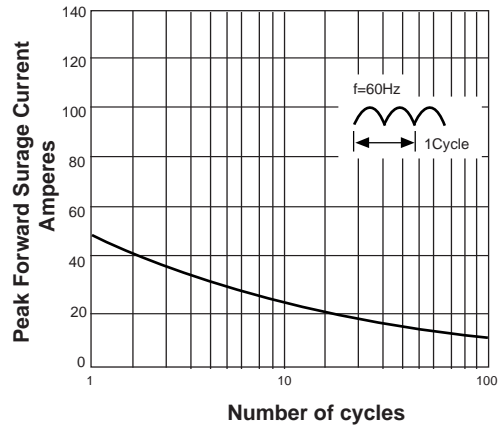
Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**Ratings And Characteristic Curves**

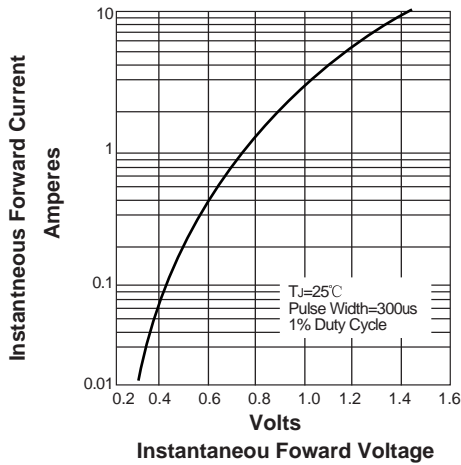
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



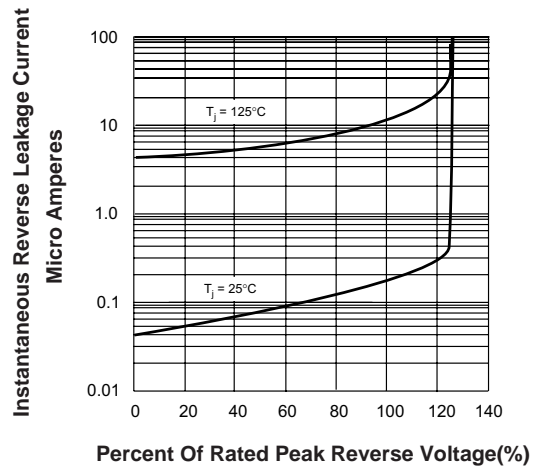
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG**



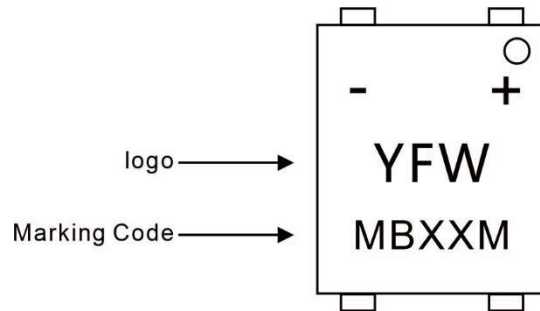
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**Marking Diagram**



**Ordering information**

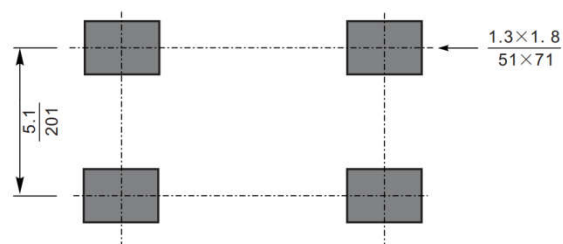
Package	Packing Description	Packing Quantity
<b>UMSB</b>	Tape/Reel, 13"reel	3000PCS/Reel 30000PCS/Carton

**Package Dimensions**

**UMSB**

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.3	1.5	51	59
C	0.17	0.29	7	12
D	6.2	7.0	244	276
E	7.1	7.6	280	299
E <sub>1</sub>	8.4	8.9	331	350
L	1.0	1.6	31.5	55
e	4.9	5.3	193	209
b	0.95	1.15	37	45
∠	10°			

**The recommended mounting pad size**



Unit:  $\frac{\text{mm}}{\text{(mil)}}$

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