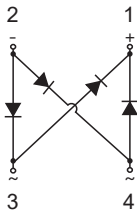


Surface Mount Glass Passivated Bridge Rectifiers

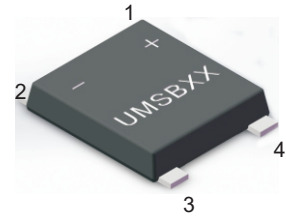
Features

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000V
- High Surge Current Capability
- Designed for Surface Mount Application

Block Diagram



UMSB



- 1.Output Anode(+) 2.Output Cathode (-)
3.Input Pin(~) 4.Input Pin(~)

Marking Code:

MSB30B: MB30B
MSB30D: MB30D
MSB30G: MB30G
MSB30J: MB30J
MSB30K: MB30K
MSB30M: MB30M

Maximum Ratings and Electrical Characteristics

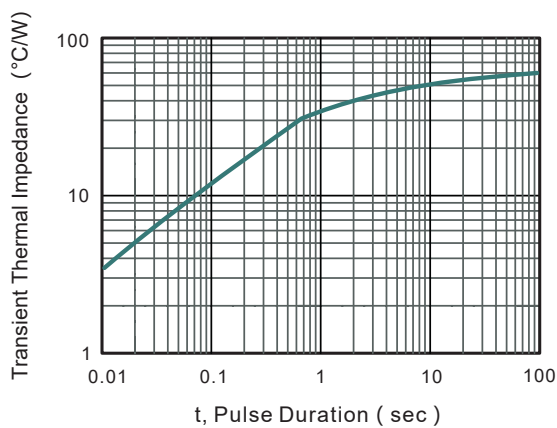
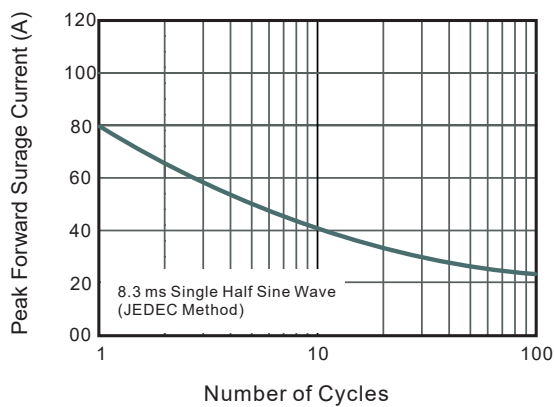
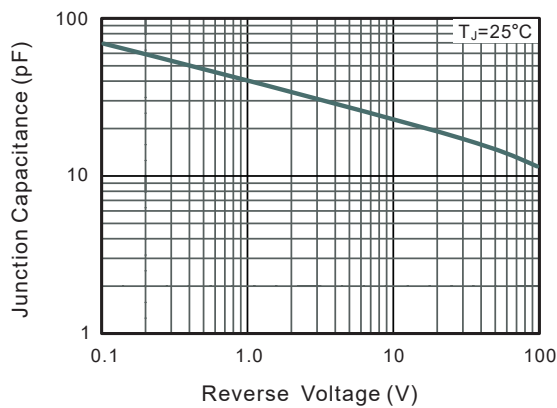
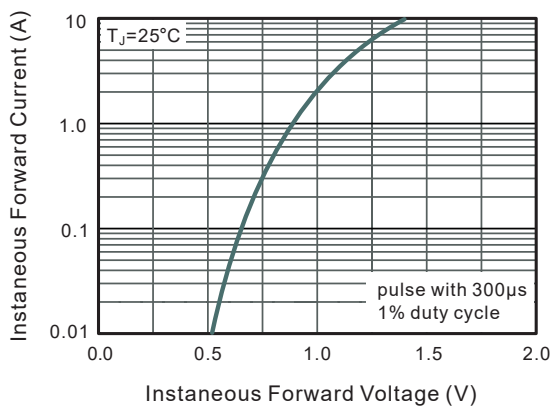
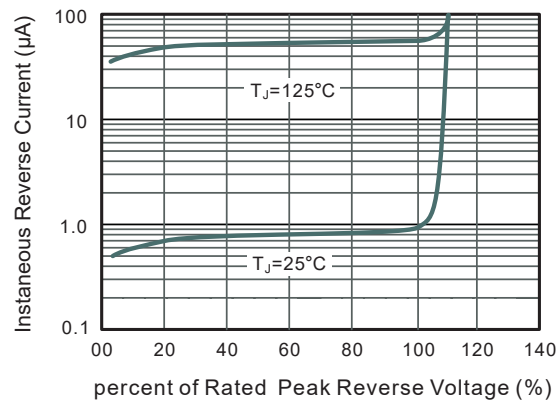
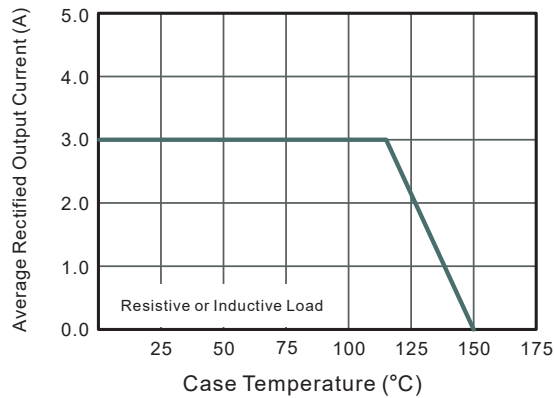
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter		Symbols	MSB30B	MSB30D	MSB30G	MSB30J	MSB30K	MSB30M	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
Maximum Average Rectified Output Current		I _O	3.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	80						A
Maximum Forward Voltage at 3 A		V _F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	5						μA
	T _A =125°C		100						
Typical Junction Capacitance ^{Note1}		C _j	40						pF
Typical Thermal Resistance ^{Note2}		R _{θJA}	60						°C/W
		R _{θJC}	10						
		R _{θJL}	25						
Junction Temperature		T _J	150						°C
Storage Temperature Range		T _{STG}	-55 to +150						°C

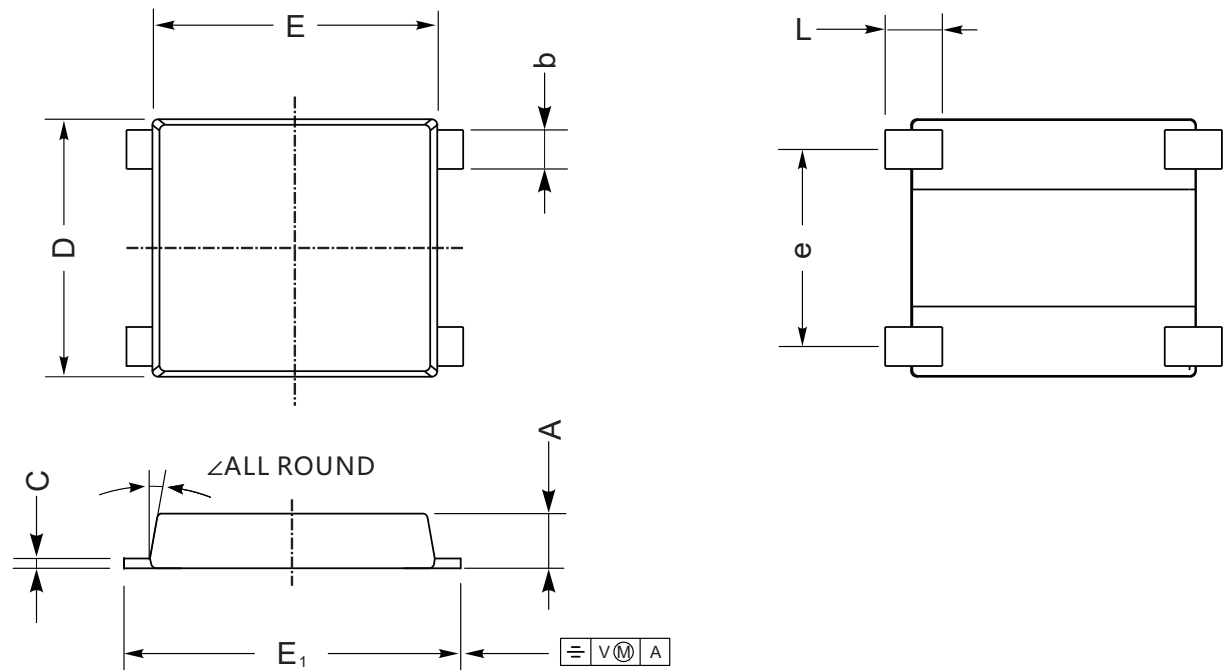
Note:

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.

Typical Characteristic Curves



Package Outline (UMSB Dimensions in mm)




UNIT		A	C	D	E	E ₁	L	e	b	∠
mm	max	1.5	0.29	7.0	7.6	8.9	1.6	5.3	1.15	10°
	min	1.3	0.17	6.2	7.1	8.4	1.0	4.9	0.95	
mil	max	59	12	276	299	350	55	209	45	
	min	51	7	244	280	331	31.5	193	37	

Contact Information

TANI website: <http://www.tanisemi.com> Email:tani@tanisemi.com

For additional information, please contact your local Sales Representative.

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Product Specification Statement

The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. TANI shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and TANI assumes no responsibility for the application of the product. TANI strives to provide accurate and up -to- date information to the best of our ability. However, due to technical, human, or other reasons, TANI cannot guarantee that the information provided in the product specification is entirely accurate and error-free. TANI shall not be held responsible for any losses or damages resulting from the use or reliance on any information in these product specifications.

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