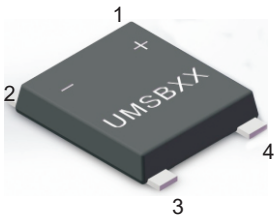
MSB30B~MSB30M

Surface Mount Glass Passivated Bridge Rectifiers

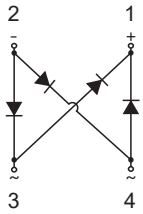
Features

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

UMSB



Block Diagram



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

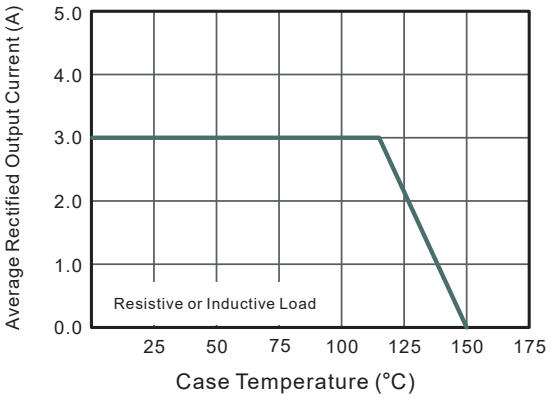
Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

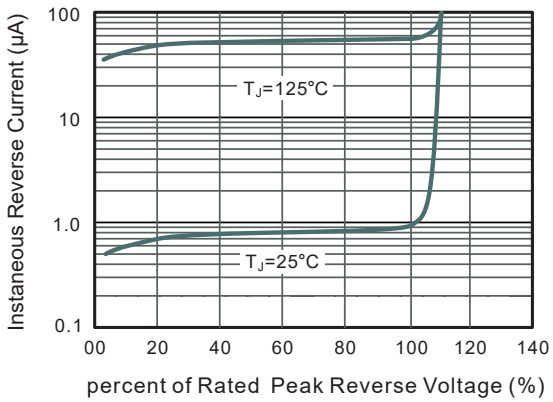
Parameter		Symbols	MSB30B	MSB30D	MSB30G	MSB30J	MSB30K	MSB30M	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	V
Maximum Average Rectified Output Current		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		$R_{\theta JA}$	60						°C/W
		$R_{\theta JC}$	10						
		$R_{\theta JL}$	25						
Junction Temperature		T_J	150						°C
Storage Temperature Range		T_{STG}	-55 to +150						°C

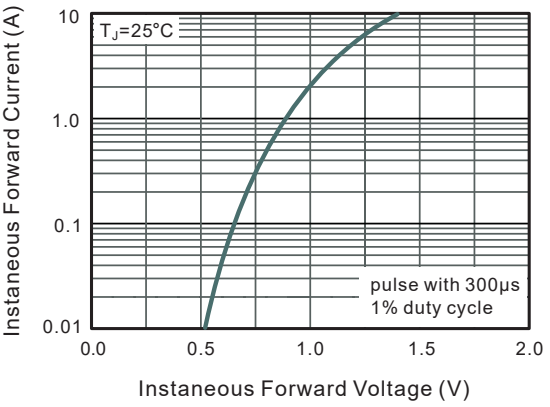
Note:

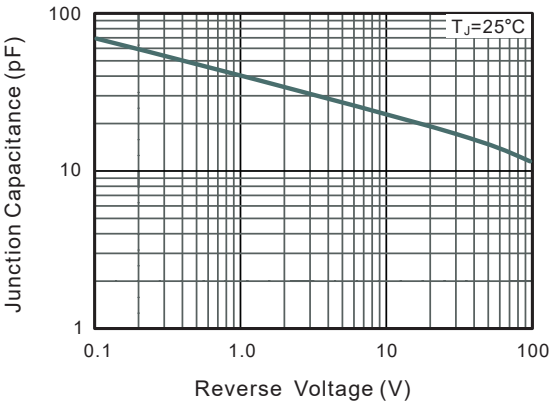
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×1.5"×1.5"（3.81×3.81 cm）copper pad.

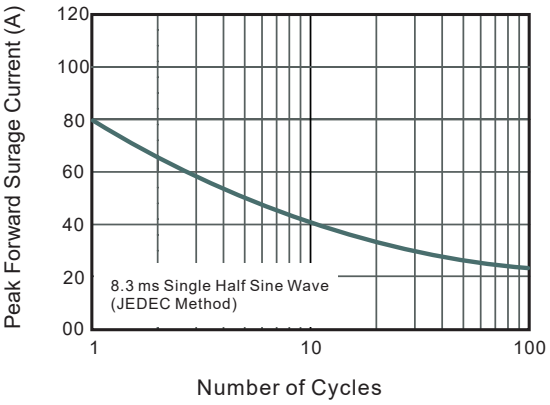
Typical Characteristic Curves

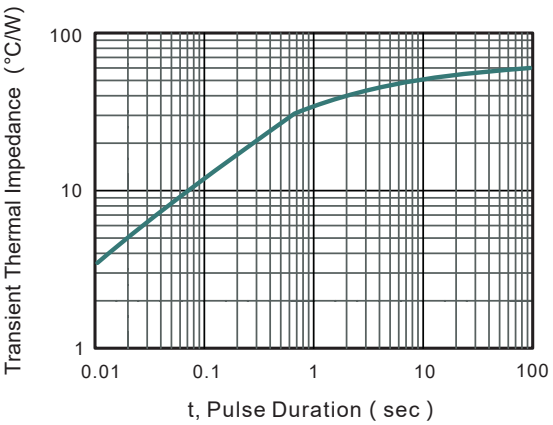








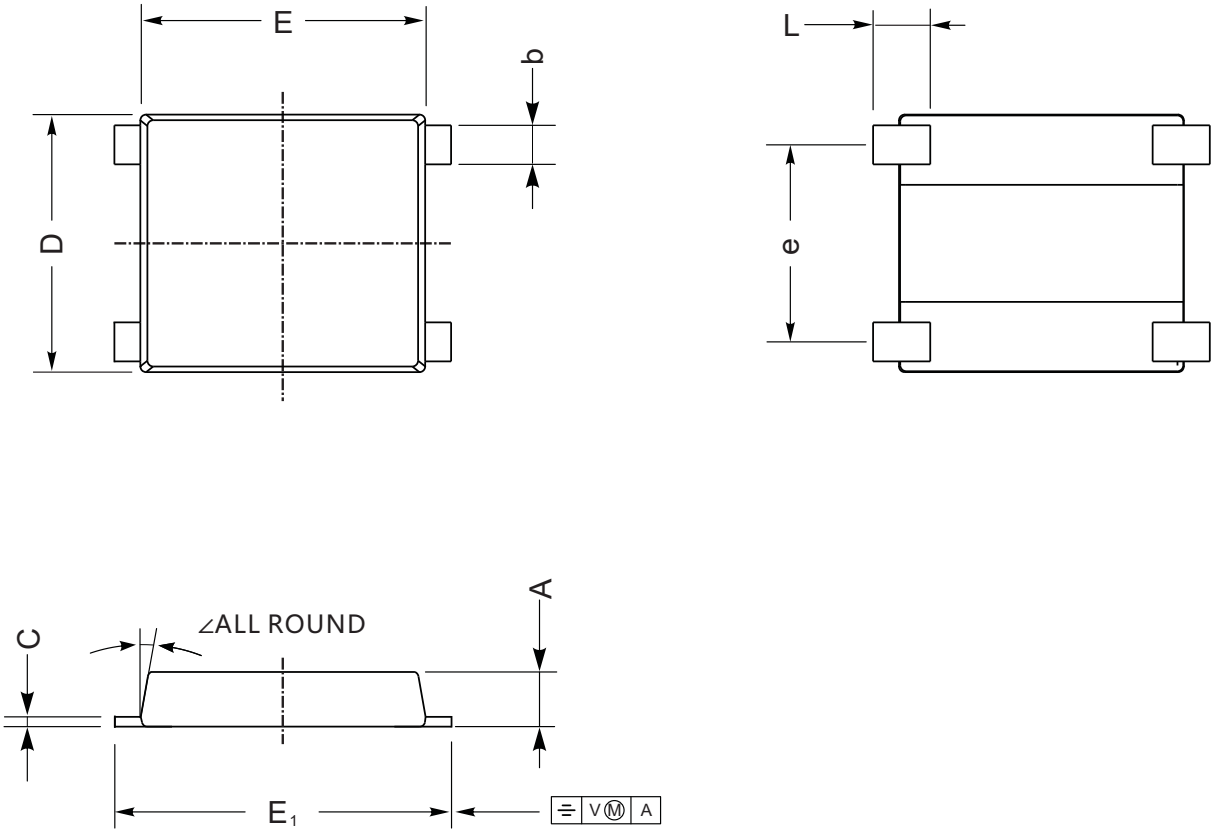




Package Outline

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	