



Features

- Glass Passivated Chip Junction
- Reverse Voltage - 50 to 1000V
- Forward Current - 3.0A
- High Surge Current Capability
- Designed for Surface Mount Application



UMSB

Mechanical Data

- Case:UMSB
- Terminals:Solderable per MIL-STD-750,Method 2026
- Approx.Weight:0.234g/ 0.00825oz

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	MSB20B	MSB20D	MSB20G	MSB20J	MSB20K	MSB20M	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
Average Rectified Output Current	I_O	2.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50						A
Maximum Forward Voltage at 2.0 A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R	5 100						μA
Typical Junction Capacitance (Note1)	C_j	30						pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^\circ\text{C}$

Note: 1. Measured at 1MHz 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.



Rating And Characteristics Curves

Fig.1 Average Rectified Output Current Derating Curve

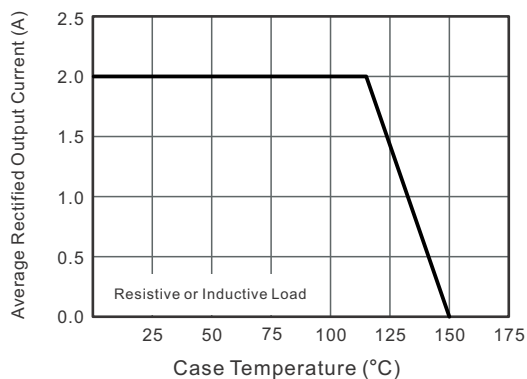


Fig.2 Typical Reverse Characteristics

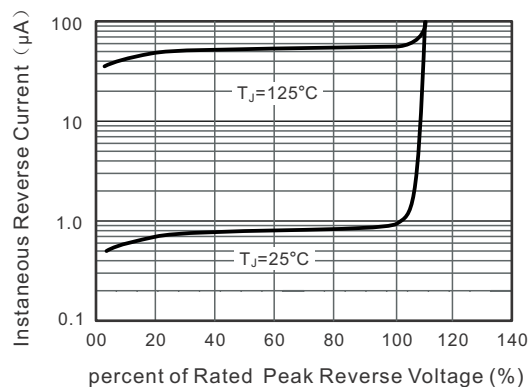


Fig.3 Typical Instantaneous Forward Characteristics

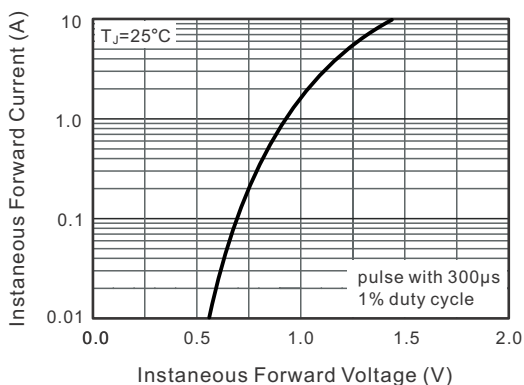


Fig.4 Typical Junction Capacitance

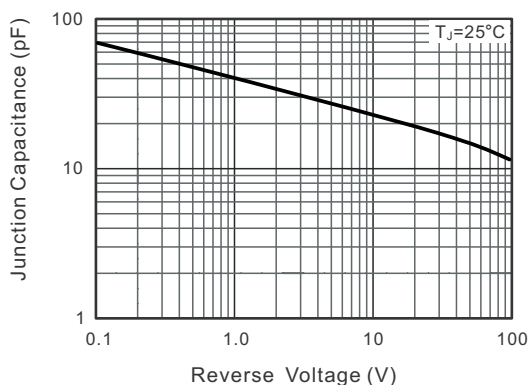
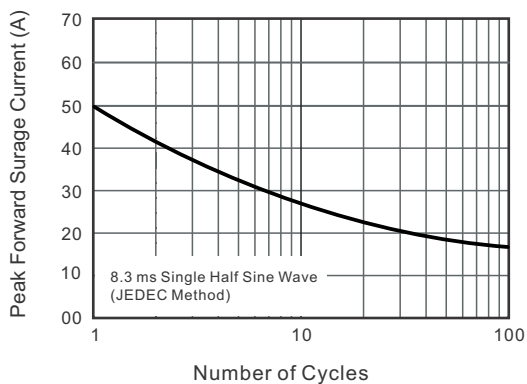
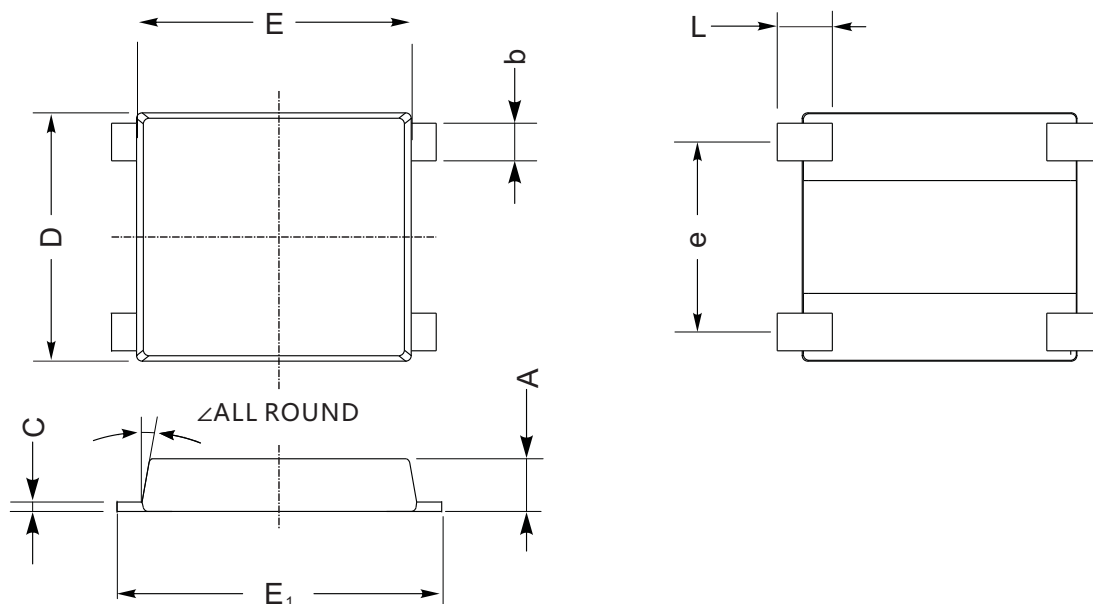


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





UMSB Package Outline Dimensions



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	



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