



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%.

Type Number	MSB30A	MSB30B	MSB30D	MSB30G	MSB30J	MSB30K	MSB30M	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100							A
I ² t Rating for Fusing (1ms < t < 8.3ms)	42							A ² S
Maximum Forward Voltage Drop per Bridge Element at 3.0A	1.1							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=125°C	200							μA
Typical Thermal Resistance R _{JA} (Note 2)	30							°C/W
Operating Temperature Range, T _J	-55 — +150							°C
Storage Temperature Range, T _{stg}	-55 — +150							°C

NOTES: 1. Mounted on P.C. Board.

2. Thermal Resistance Junction to Ambient.



Rating And Characteristics Curves

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

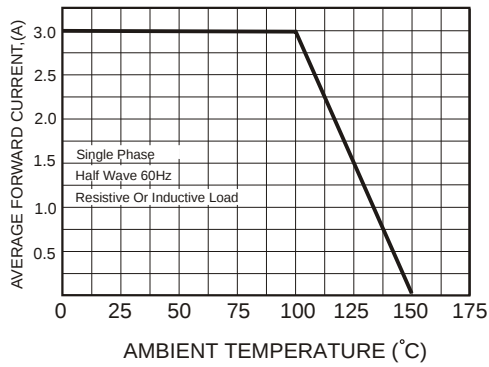


FIG.2-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

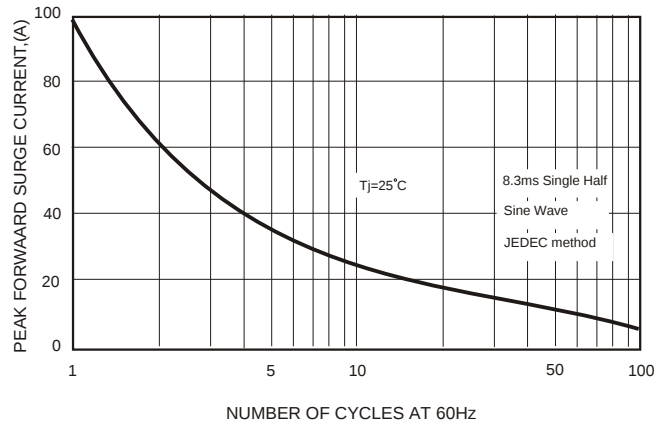


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

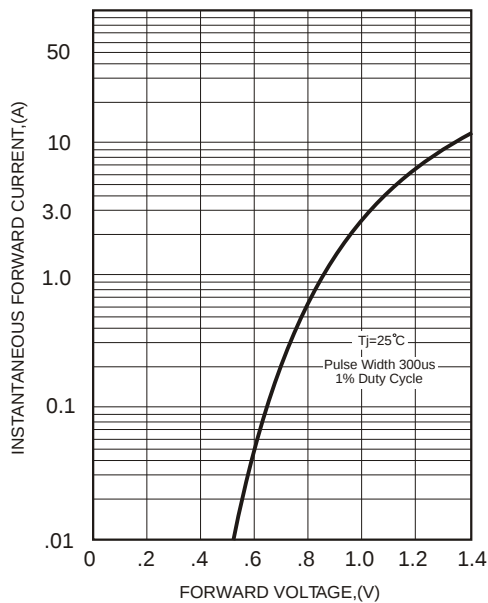
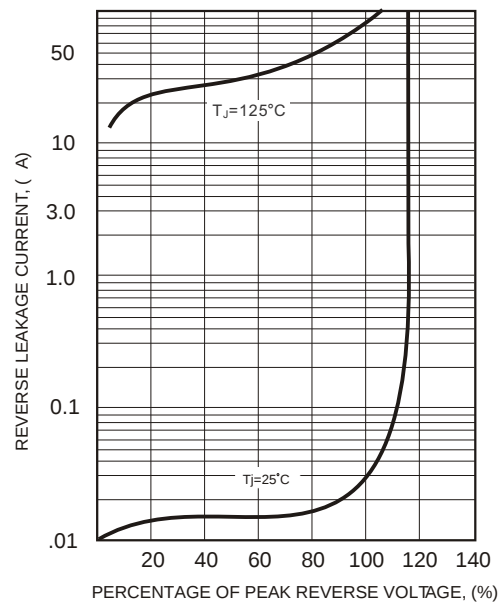
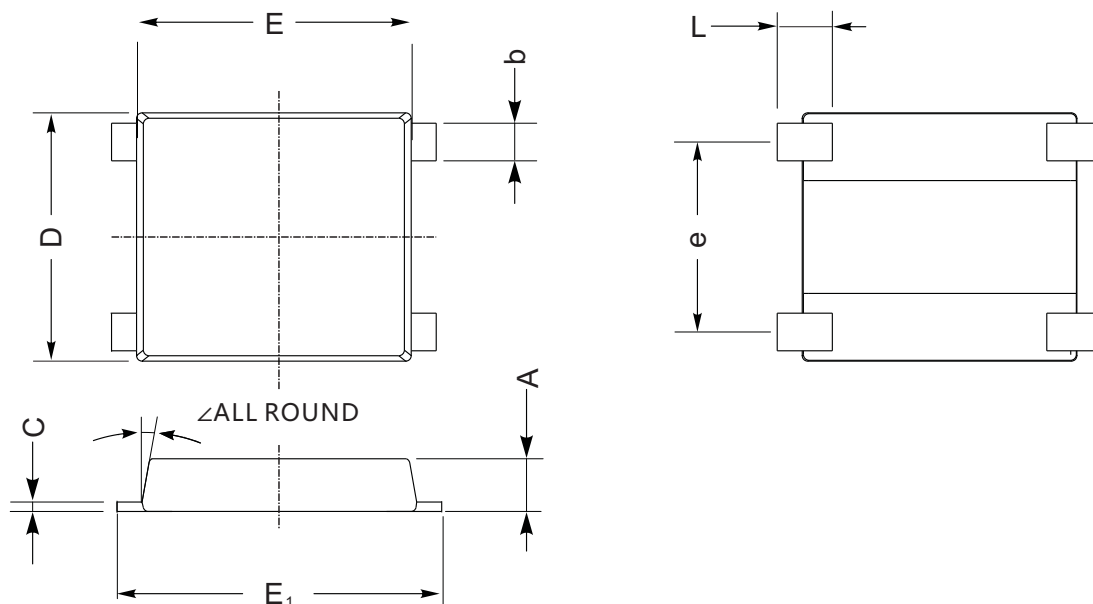


FIG.4-TYPICAL REVERSE
CHARACTERISTICS





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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