

**FEATURES:**

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 4.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

**MECHANICAL DATA**

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

Marking code
FMSB30A --- FMSB30M

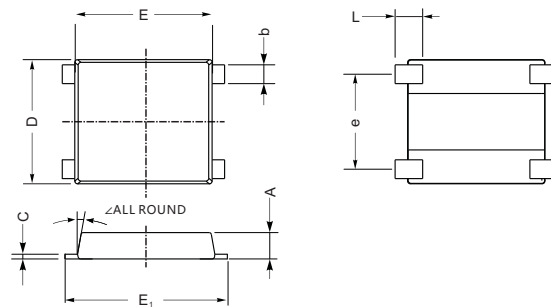
**VOLTAGE RANGE**

50 to 1000 Volts

**CURRENT**

3.0 Ampere

**UMSB**



UNIT		A	C	D	E	E <sub>1</sub>	L	e	b	Z
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	

## 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	FMSB30A	FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	FMSB30M	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=25°C								3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								80	A
Maximum Forward Voltage Drop per Bridge Element at 3.0A.								1.3	V
Maximum DC Reverse Current at Rated DC Blocking Voltage								5.0	μA
								200	μA
Maximum Reverse Recovery Time (Note 1)								500	TRR
Typical Junction Capacitance (Note 2)								40	pF
Typical Thermal Resistance R <sub>JA</sub> (Note 3)								30	°C/W
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>								-65 — +150	°C

- NOTES:**
1. Reverse Recovery Time test condition: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A
  2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
  3. Thermal Resistance from Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (FMSB30A THRU FMBS30M)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

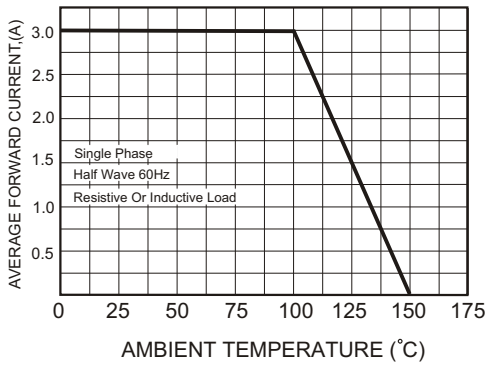


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

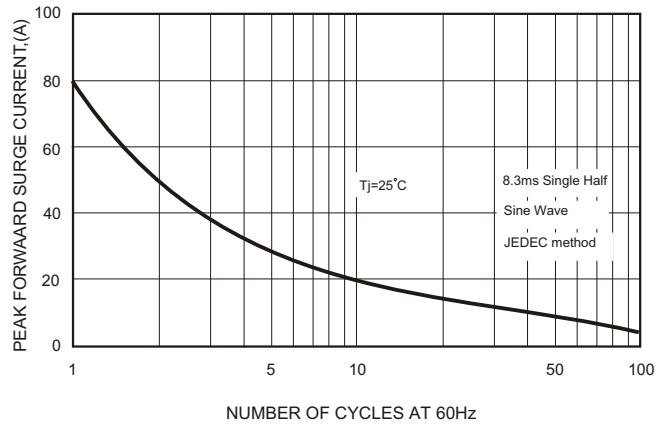


FIG.3-TYPICAL FORWARD CHARACTERISTICS

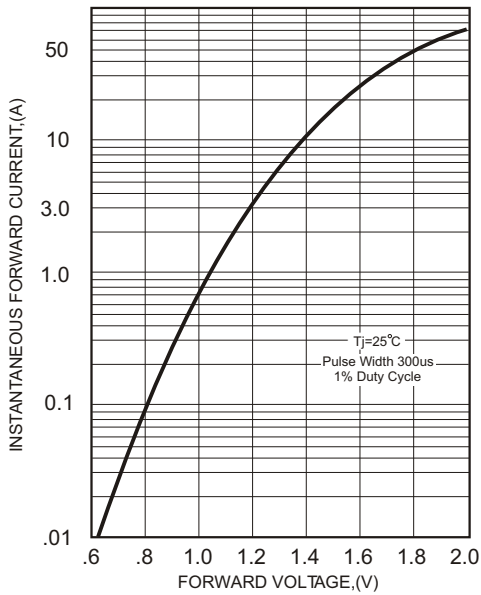


FIG.4-TYPICAL REVERSE CHARACTERISTICS

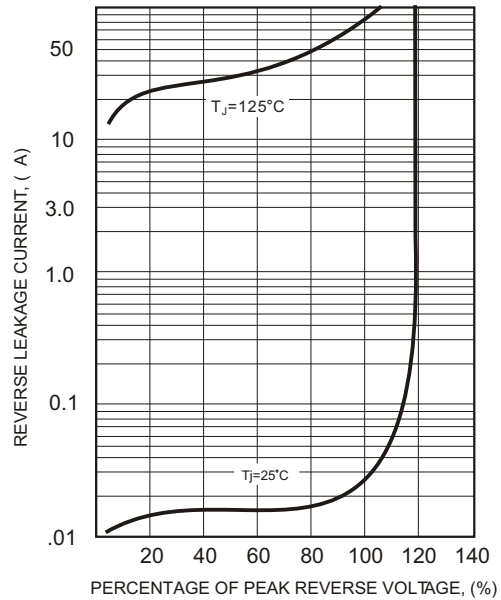


FIG.5-TYPICAL JUNCTION CAPACITANCE

