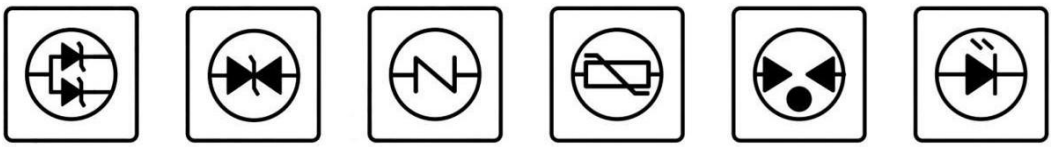
MSKSEMI 美森科
SEMICONDUCTOR



FMSB30A THRU FMBS30M

Product specification

MSKSEMI
SEMICONDUCTOR

FMSB30A THRU FMBS30M

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 3.0 Ampere

FEATURES

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

PACKAGE OUTLINE

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℃ 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℃	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80							A
I^2t Rating for Fusing (1ms < t < 8.3ms)	42							A^2S
Maximum Forward Voltage Drop per Bridge Element at 3.0A.	1.3							V
Maximum DC Reverse Current Ta=25℃	5.0							μA
at Rated DC Blocking Voltage Ta=100℃	200							μA
Maximum Reverse Recovery Time (Note 1)	500							TRR
Typical Junction Capacitance (Note 2)	40							pF
Typical Thermal Resistance R JA (Note 3)	30							C/W
Operating and Storage Temperature Range T_J, T_{STG}	-65 —— +150							℃

NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=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

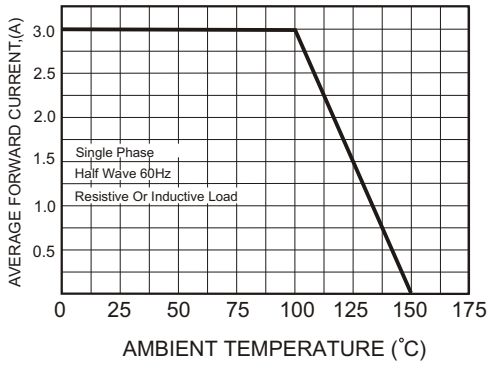


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

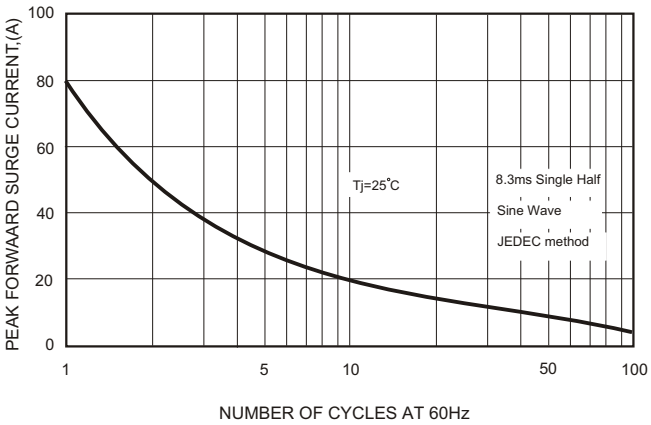


FIG.3-TYPICAL FORWARD CHARACTERISTICS

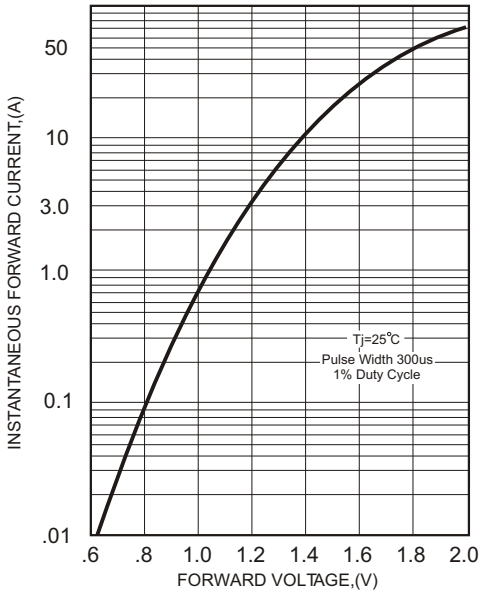


FIG.4-TYPICAL REVERSE CHARACTERISTICS

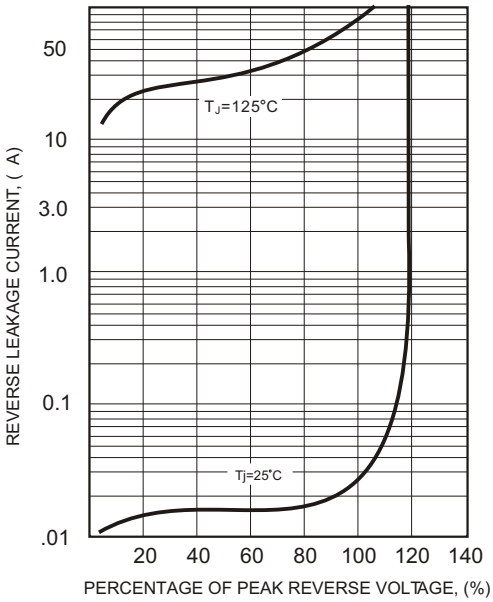
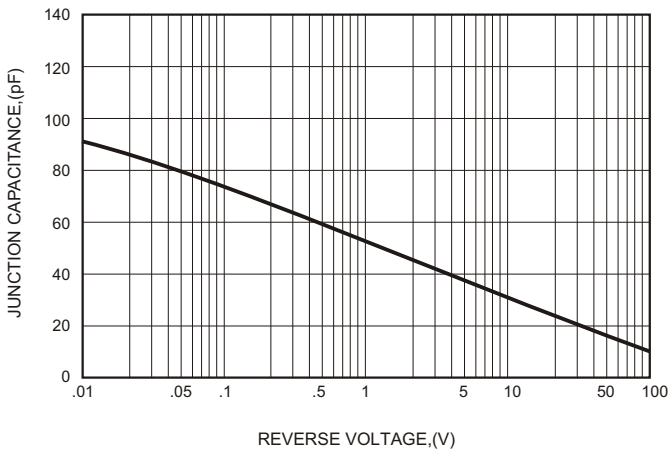
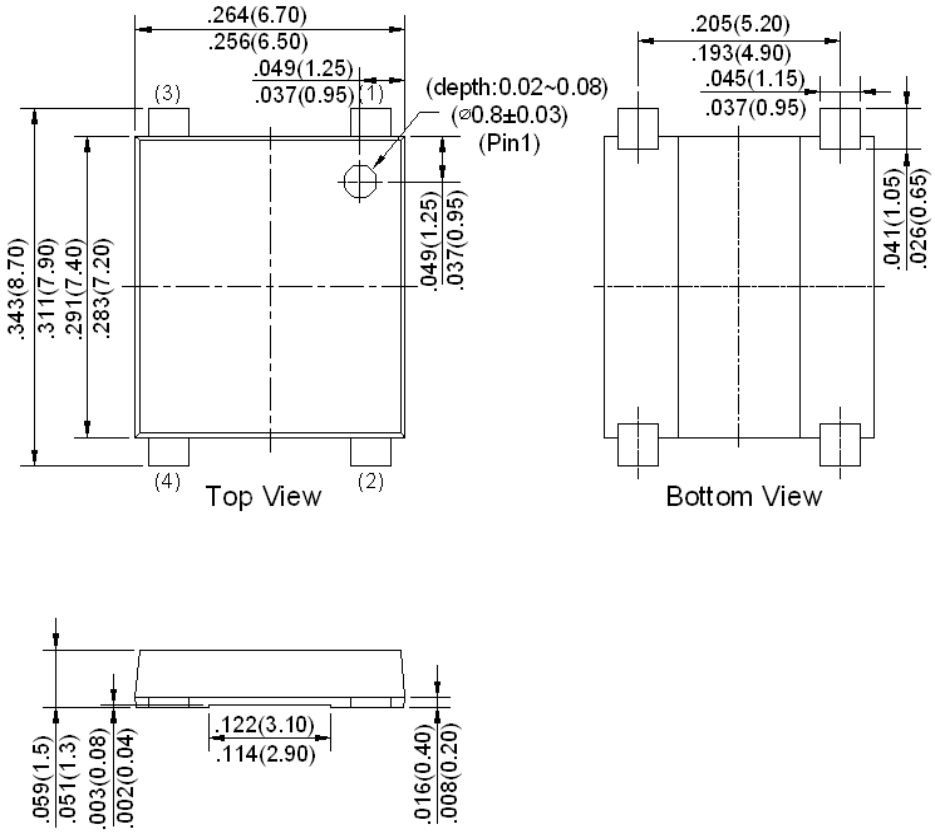


FIG.5-TYPICAL JUNCTION CAPACITANCE

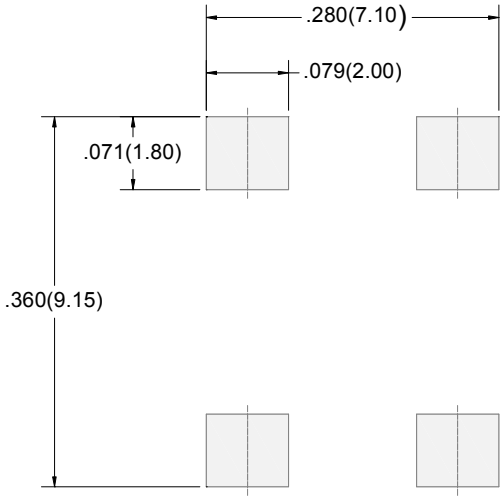


UMSB Package Outline Dimensions



Dimensions in inches and (millimeters)

UMSB Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
FMSB30A THRU FMBS30M	UMSB	3000

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