

FMSB30B~FMSB30M

Rev.A Mar.-2023



DATA SHEET

3.0A

UMSB

3.0A Surface Mount Glass Passivated Bridge Rectifier,UMSB thin package.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating						Unit
		FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	FMSB30M	
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 at T _c = 115 °C	I _o	3.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	90						A
Typical Junction Capacitance Note1	C _i	40						pF
Typical Thermal Resistance Note2	R _{JA} R _{JC} R _{JL}	65 15 30						°C/W
Maximum Reverse Recovery Time Note3	t _{rr}	150		250		500		ns
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150						

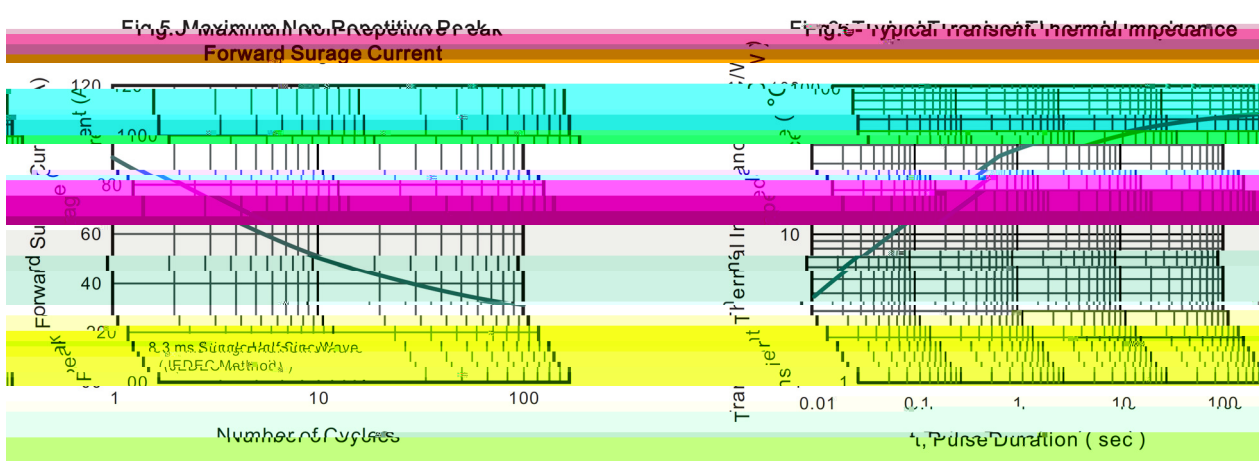
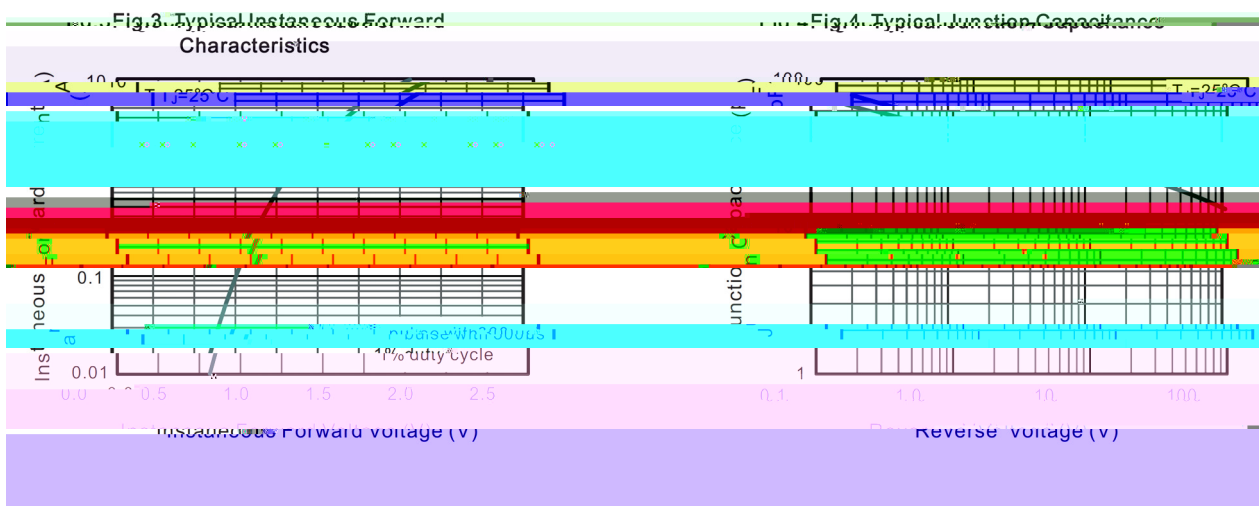
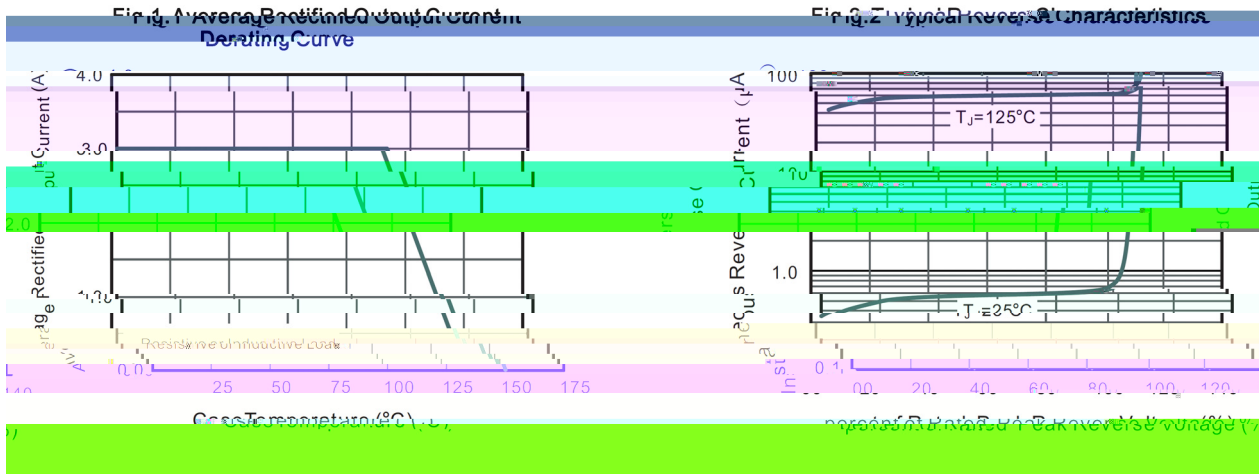
Note:

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" 3.81×3.81cm copper pad.
3. Measured with I_F= 0.5 A, I_R = 1 A, I_{rr} = 0.25 A .

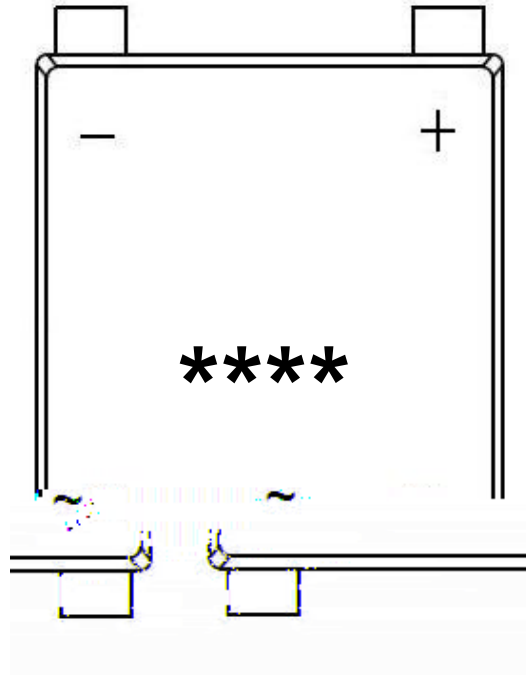
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating					Unit
			FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	
Forward Voltage per element	V _F	I _F =3.0A	1.3					V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I _R	T _a =25	5.0					μA
		T _a =125	200					

/ Electrical Characteristic Curve



/ Marking Instructions



FMB30B

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Note:

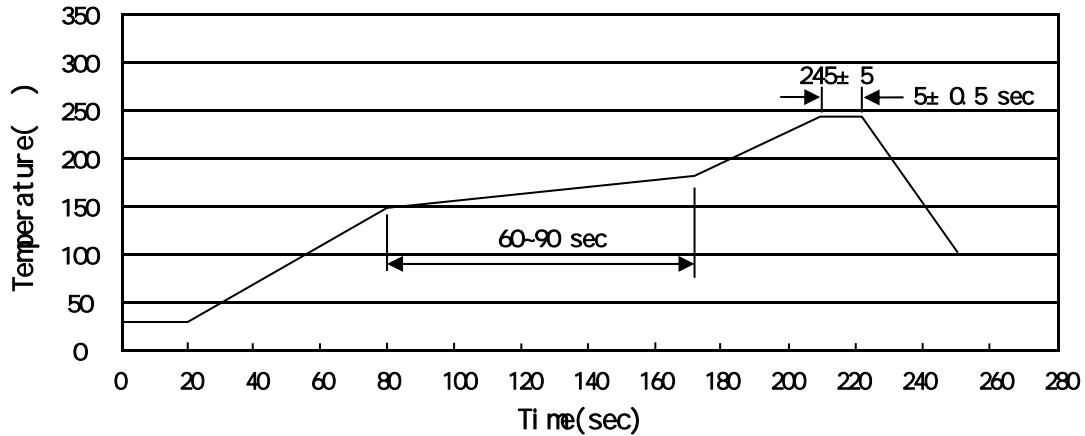
FMB30B Product Type Code

**** Lot No. Code The 1st * means:YM Code The last 3 * means:little Lot
No Code

Marking

Type number	Marking code
FMSB30B	FMB30B
FMSB30D	FMB30D
FMSB30G	FMB30G
FMSB30J	FMB30J
FMSB30K	FMB30K
FMSB30M	FMB30M

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245 | 5 | 5 | 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
UMSB	3,000	2	6,000	6	36,000	13"x16	337x337x49	380x335x366

/ Notices