

Rev.A Mar.-2023

3.0A

UMSB

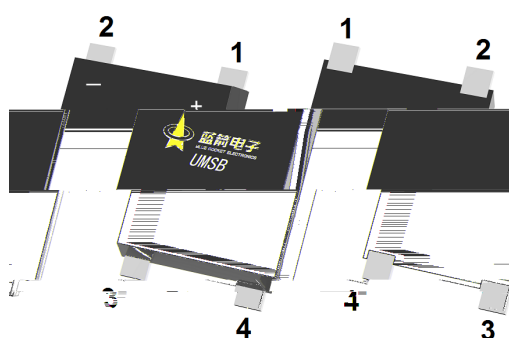
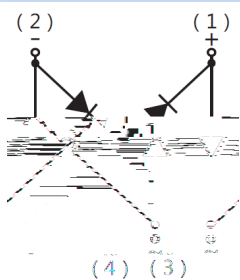
3.0A Surface Mount Glass Passivated Bridge Rectifier,UMSB thin package.

100V~1000V

3.0A

Glass Passivated Chip Junction, Fast reverse recovery time, Reverse Voltage :100 to 1000V,
 Forward Current: 3.0A, Designed for Surface Mount Application,HF product.

General purpose.



PIN	DESCRIPTION
1	Output Anode +
2	Output Cathode -
3	Input Pin ~
4	Input Pin ~

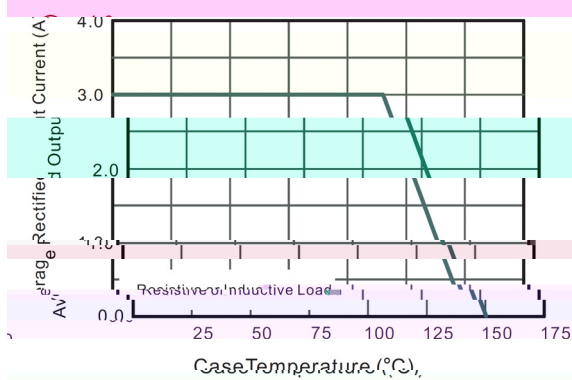
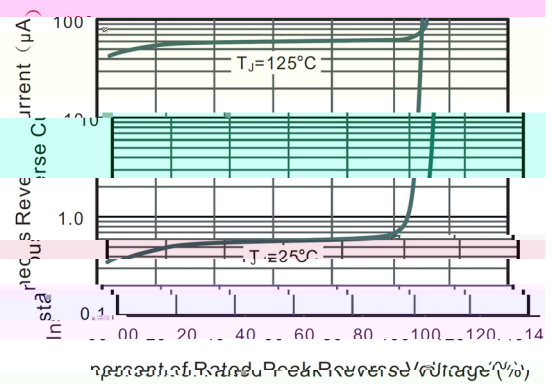
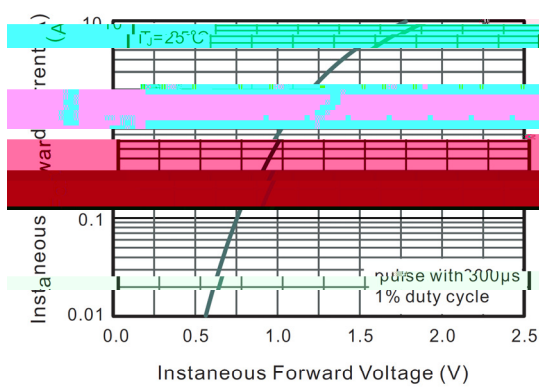
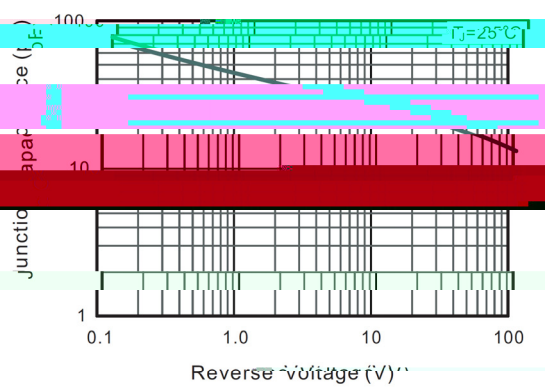
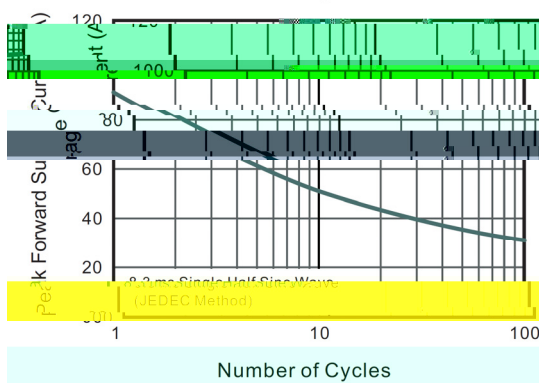
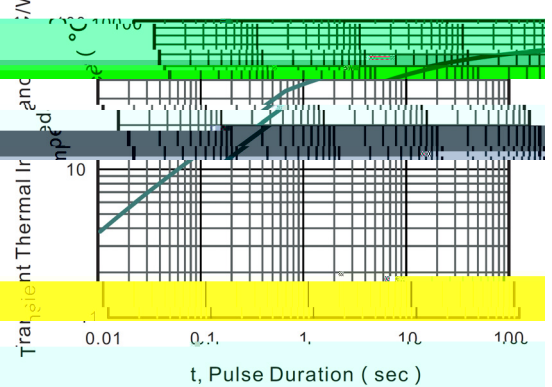
See Marking Instructions.

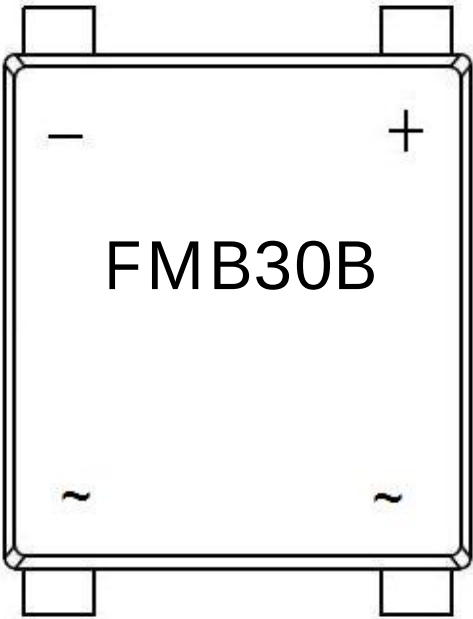
Parameter	Symbol	Rating						Unit
		FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	FMSB30M	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	800	1000	V
Average Rectified Output Currentat Tc = 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 _{θJA} R _{θJC} R _{θJL}	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 $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

Parameter	Symbol	Test Conditions	Rating						Unit
			FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	FMSB30M	
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						

**Fig.1 Average Rectified Output Current
Operating 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**

Fig.6 Typical Transient Thermal Impedance




FMB30B

1 * 3 *

Note:

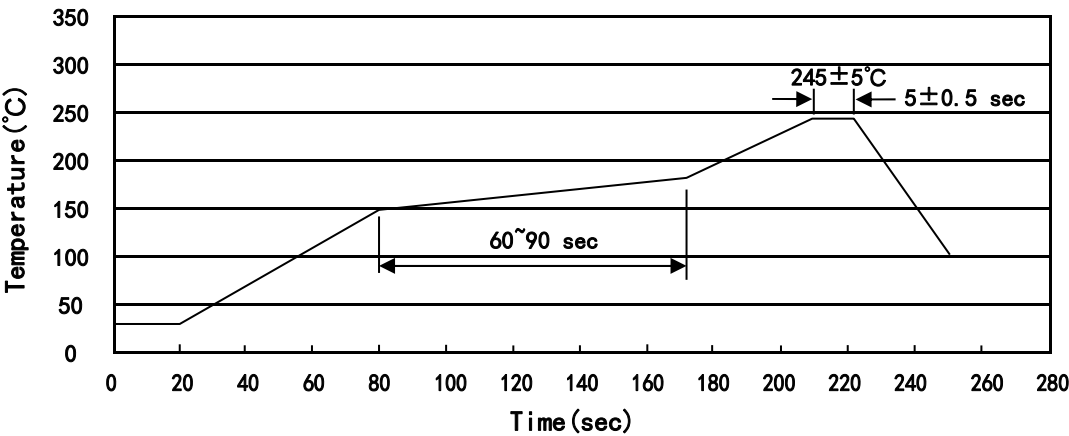
FMB30B Product Type Code

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

No Code

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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension			(unit mm ³)
UMSB	3,000	2	6,000	6	36,000	13"×16	337×337×49	380×335×366	