/ Descriptions

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

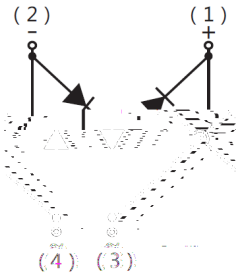
/ Features

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

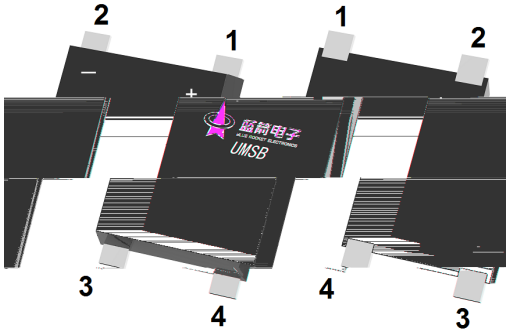
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



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

/ Marking

See Marking Instructions.

/ 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 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_j	40						pF
Typical Thermal Resistance Note2	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	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	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						

/ Electrical Characteristic Curve

Fig.1 Average Rectified Output Current Derating Curve

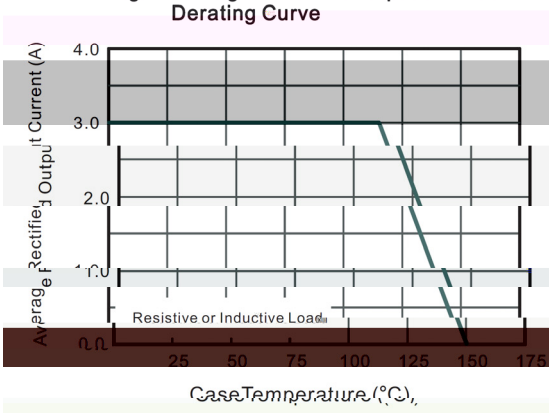


Fig.2 Typical Reverse Characteristics

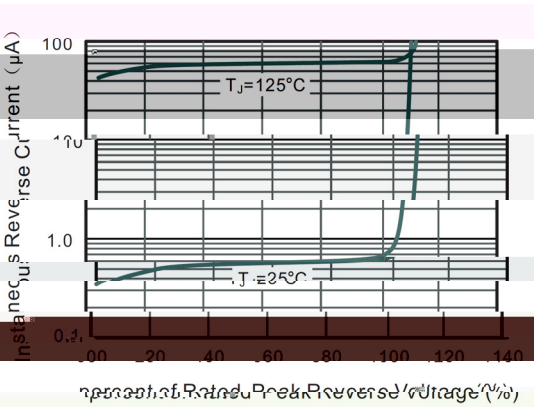


Fig.3 Typical Instaneous Forward Characteristics

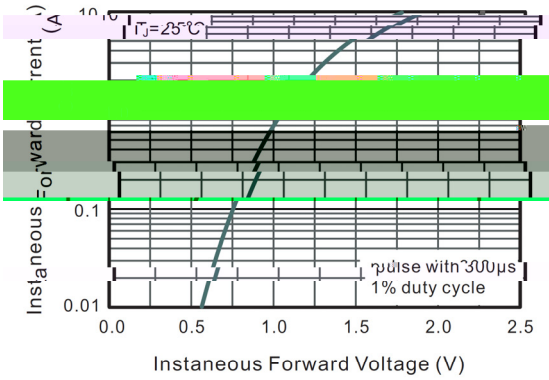


Fig.4 Typical Junction Capacitance

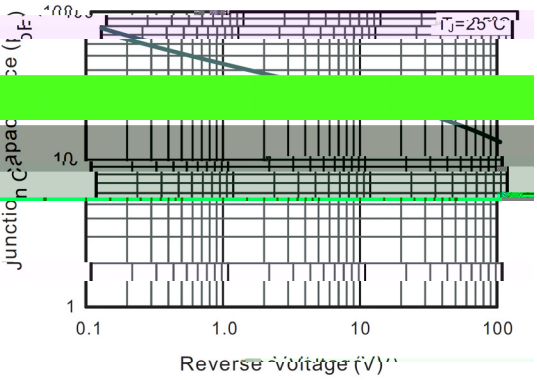


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

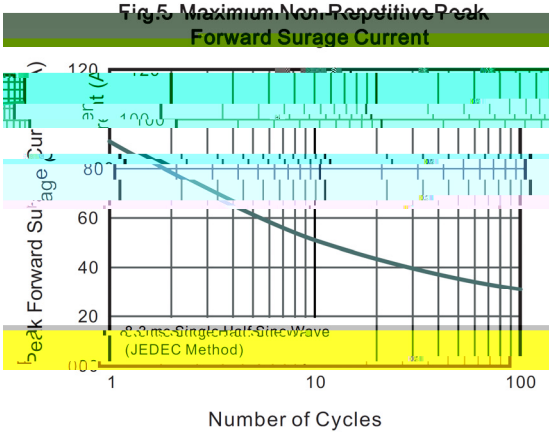
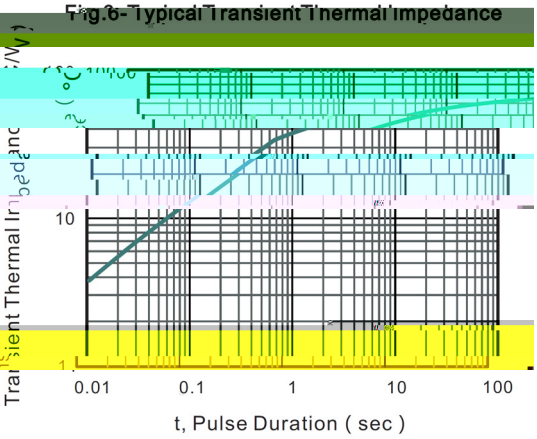
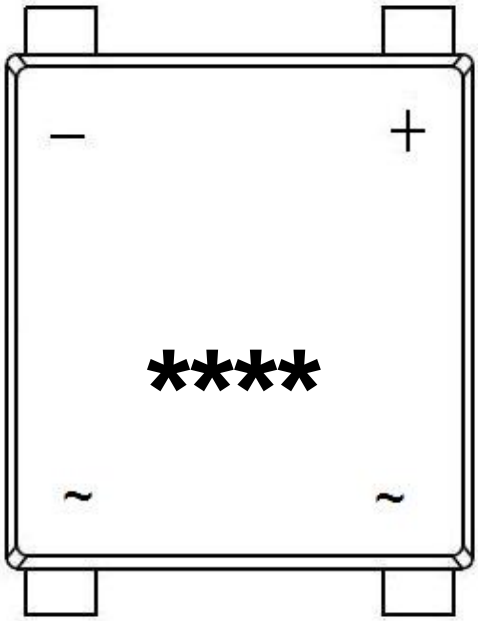


Fig.6 Typical Transient Thermal Impedance



/ Marking Instructions



FMB30B
****

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

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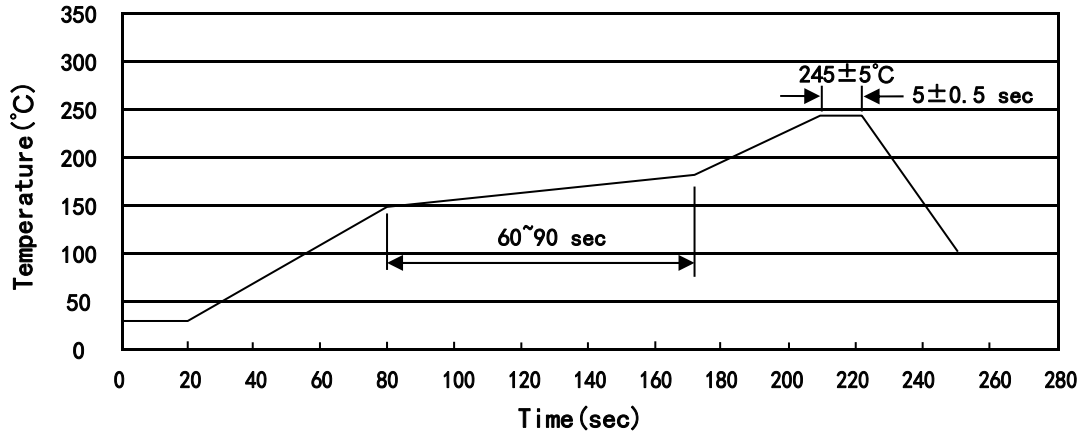

Note:

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 mm³)
	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“×16	337×337×49	380×335×366

/ Notices