

/ 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 _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 $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

/ 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						

I Electrical Characteristic Curve

Fig.1 Average Rectified Output Current Derating Curve

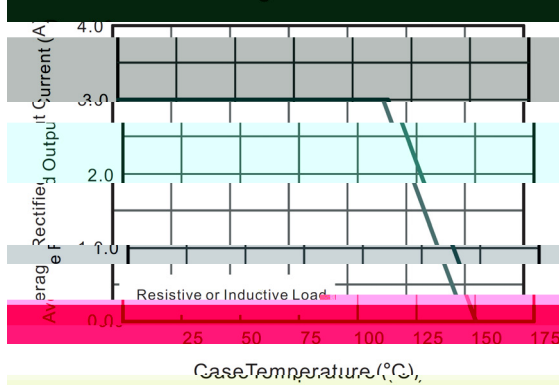


Fig.2 Typical Reverse Characteristics

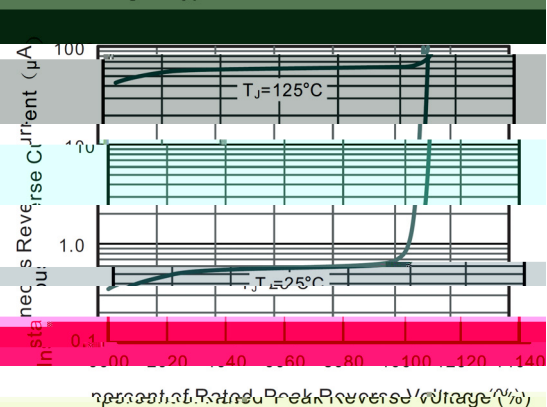


Fig.3 Typical Instantaneous Forward Characteristics

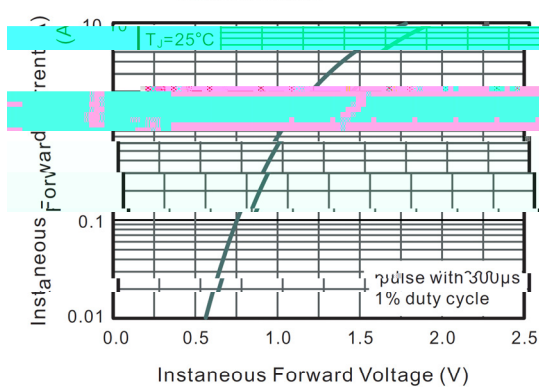


Fig.4 Typical Junction Capacitance

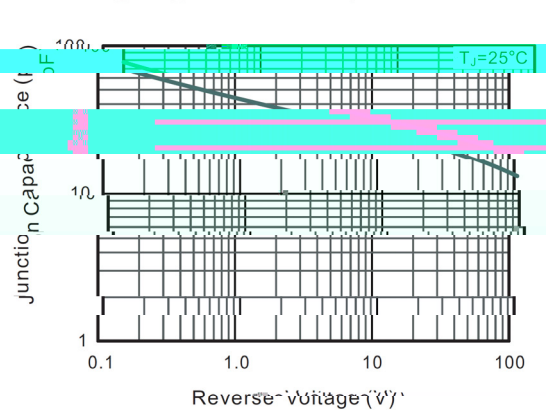


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

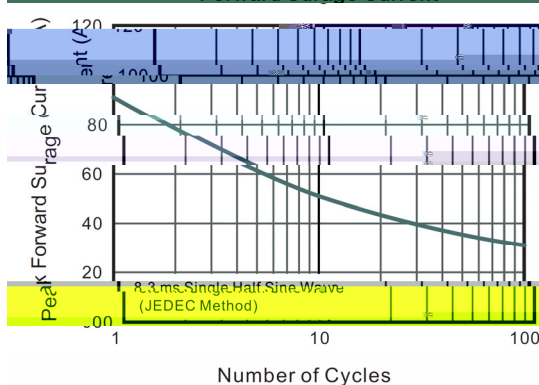
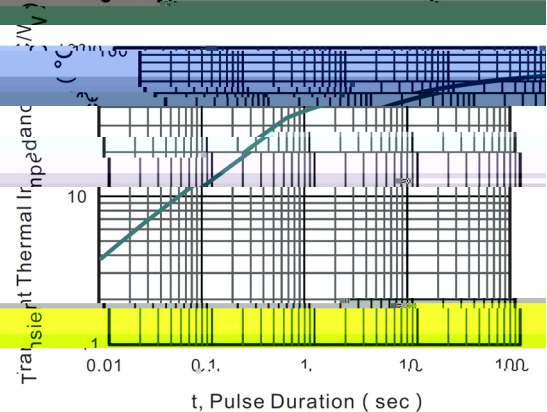
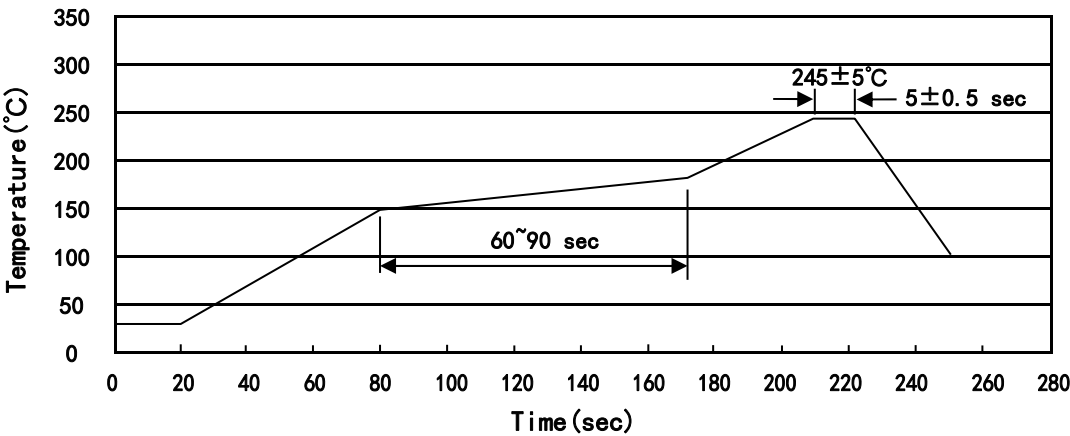


Fig.6 Typical Transient Thermal Impedance



() / 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"×16	337×337×49	380×335×366

/ Notices