

UMSB Plastic-Encapsulate Bridge Rectifier

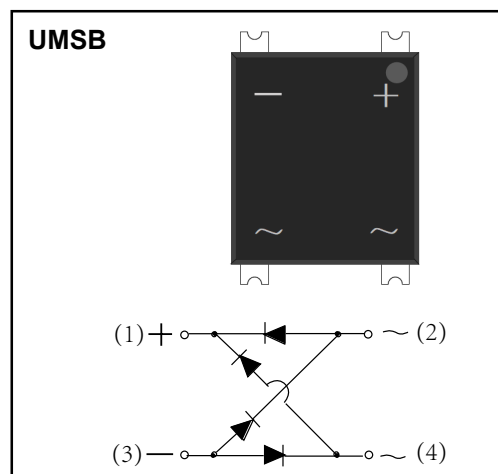
Fast Recovery Rectifier

Features

- I_o 3A
- VRRM 50V-1000V
- Low forward voltage drop
- High surge current capability
- Glass passivated chip junction

Mechical Data

- Case: UMSB molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL- STD-202, Method 208
- Polarity: Color band denotes cathode end



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	RMSB30						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V		50	100	200	400	600	800	1000
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, $T_a = 60^\circ C$	3.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , $T_a = 25^\circ C$	90						
Junction Temperature	T_J	$^\circ C$		-55~+150						
Storage Temperature	T_{STG}	$^\circ C$		-55 ~ +150						

Electrical Characteristics ($T_a = 25^\circ C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		RMSB30						
					A	B	D	G	J	K	M
Forward voltage	V _F	V	I _F =3.0A		1,3						
Maximum reverse recovery time	T _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A		150			250		500	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25°C	5						
	T _a =125°C			500							
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	Between junction and ambient		55						
	R _{θJ-L}		Between junction and terminal		15						
	R _{θJ-C}		Between junction and case		10						

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

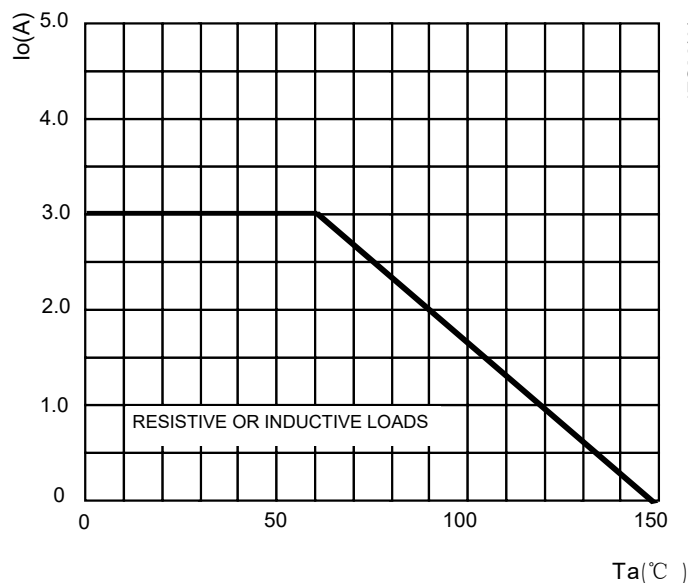


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

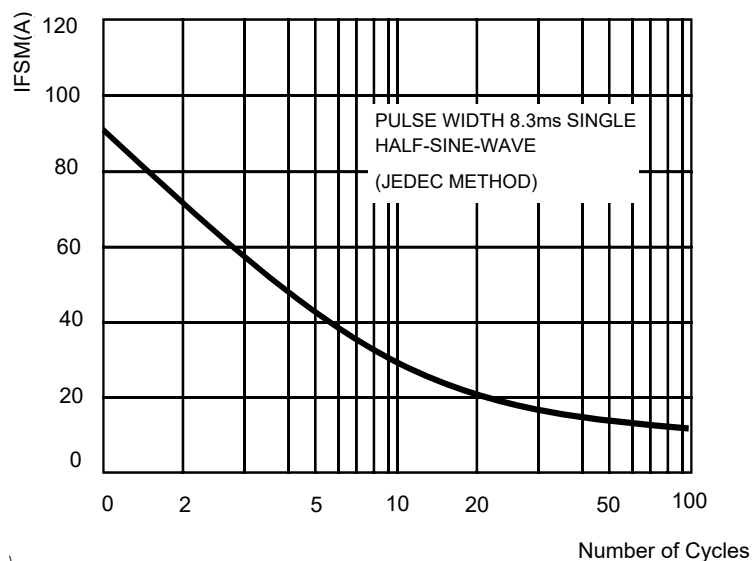


FIG.3: TYPICAL FORWARD CHARACTERISTICS

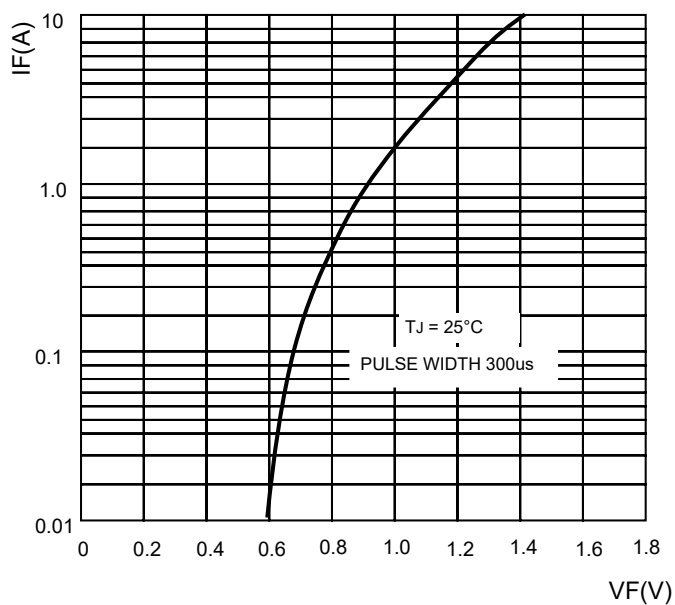
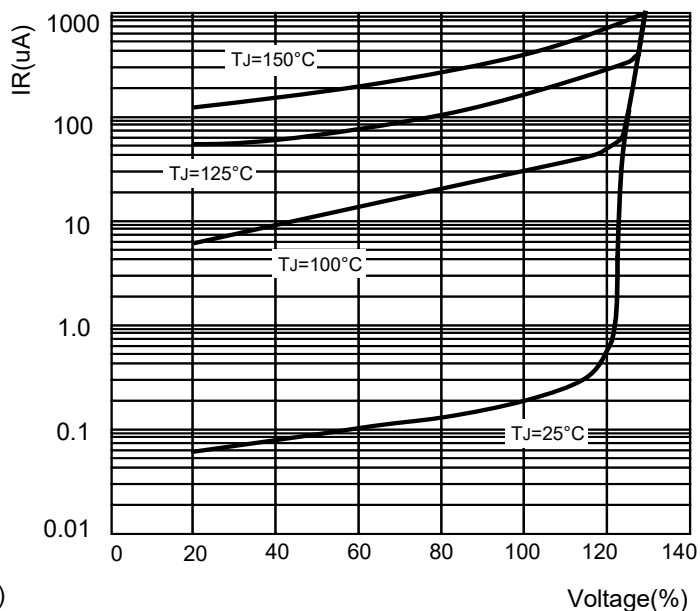
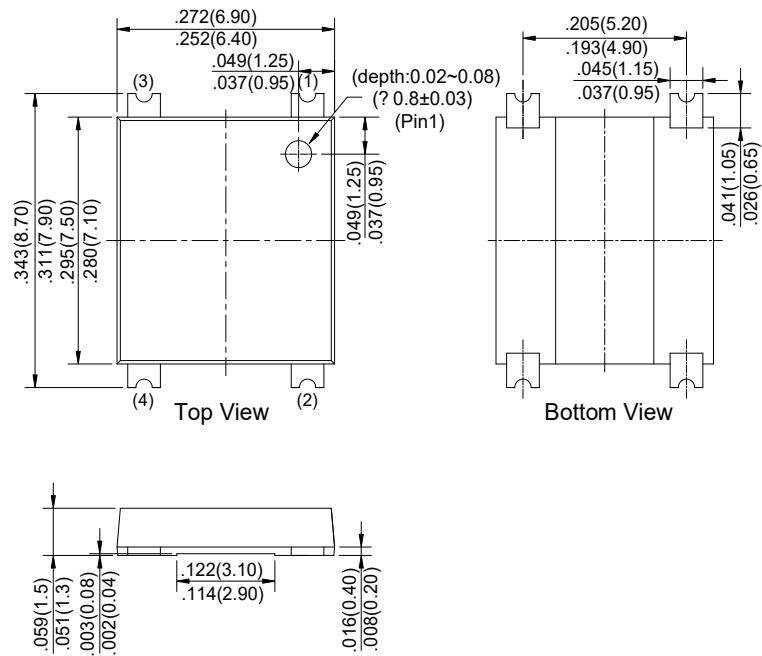


FIG.4: TYPICAL REVERSE CHARACTERISTICS

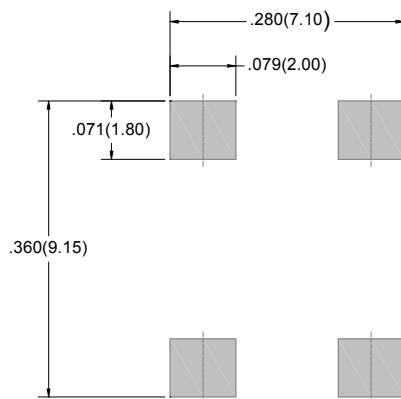


UMSB Package Outline Dimensions



Dimensions in inches and (millimeters)

UMSB Suggested Pad Layout



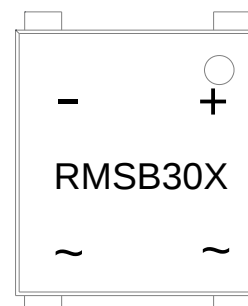
Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Ordering Information

Part Number	Package	Shipping Quantity
RMSB30A- RMSB30M	UMSB	3000/tape&Reel

Marking Diagram



X:From ATo M