**UMSB Plastic-Encapsulate Bridge Rectifier****RMSB30MA** Bridge Rectifier**Features**

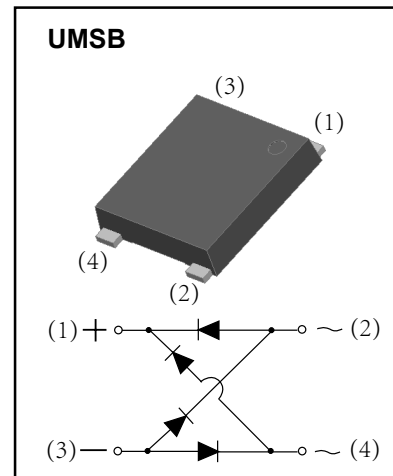
- $I_{F(AV)}$ 3A
- V_{RRM} 1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- RMSB30MA

**Limiting Values (Absolute Maximum Rating)**

Item	Symbol	Unit	Conditions		RMSB30MA
Repetitive Peak Reverse Voltage	V_{RRM}	V			1000
Maximum RMS Voltage	V_{RMS}	V			700
Maximum DC Blocking Voltage	V_{DC}	V			1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load, $T_a=100^{\circ}C$	On alumina substrate	3.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	8.3ms sine wave, 1 cycle, $T_j=25^{\circ}C$		110
Current Squared Time	I^2t	A ² S	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode		50.2
Operation Junction and Storage Temperature Range	T_J, T_{stg}	$^{\circ}C$			-55 ~+150

Electrical Characteristics ($T=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		Max
Maximum Peak Forward Voltage	V_{FM}	V	$I_{FM}=3.0A$, Pulse measurement, Rating of per diode		1.3
Maximum Reverse Recovery Time	T_{RR}	ns	Measured with $I_F=0.5A, I_R=1A, I_{RR}=0.25A$		250
Maximum Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	$T_A=25^{\circ}C$	5.0
	I_{RRM2}	μA		$T_A=125^{\circ}C$	500
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient, On alumina substrate		55
	$R_{\theta J-L}$		Between junction and lead		15
	$R_{\theta J-C}$		Between junction and case		10

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

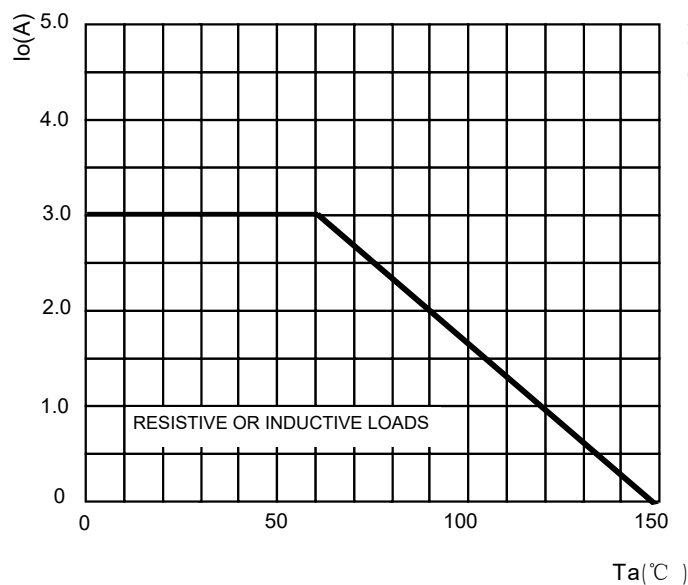


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

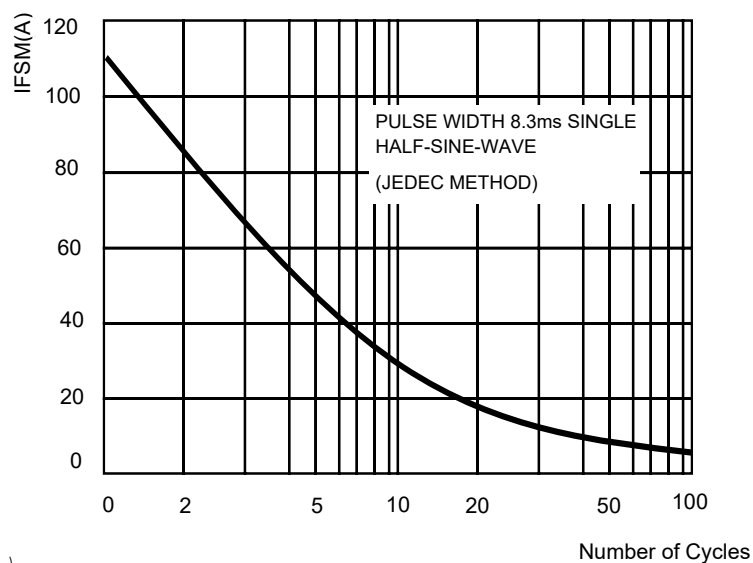


FIG.3: TYPICAL FORWARD CHARACTERISTICS

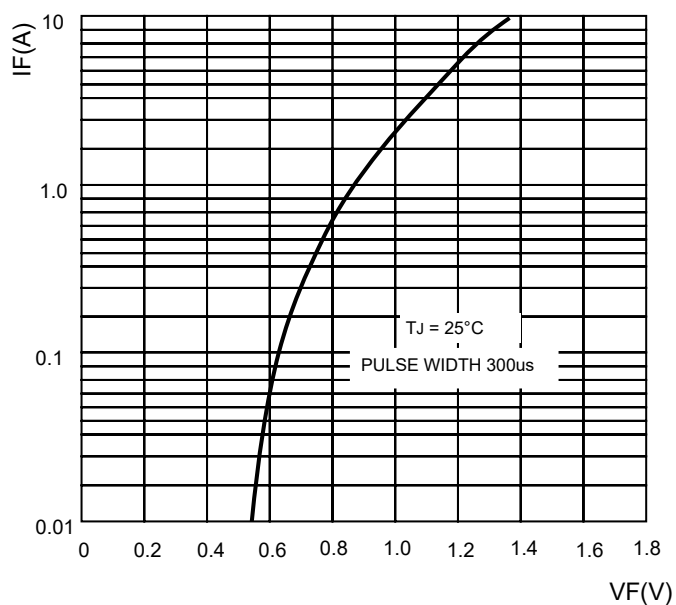
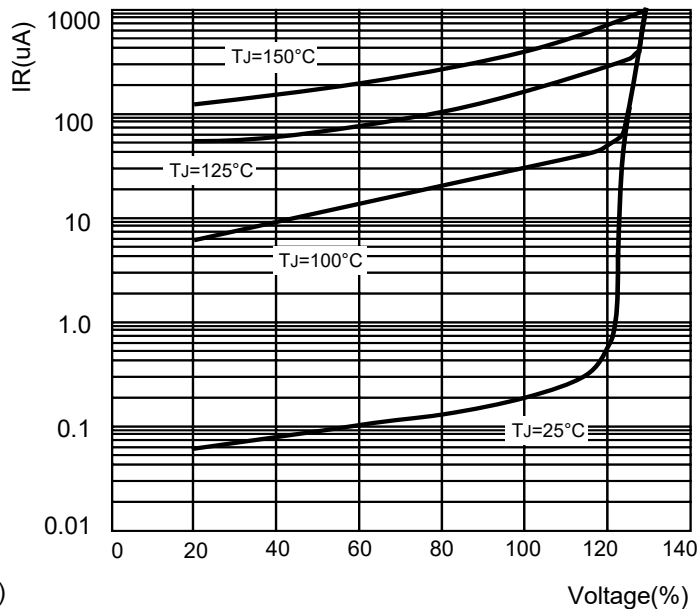
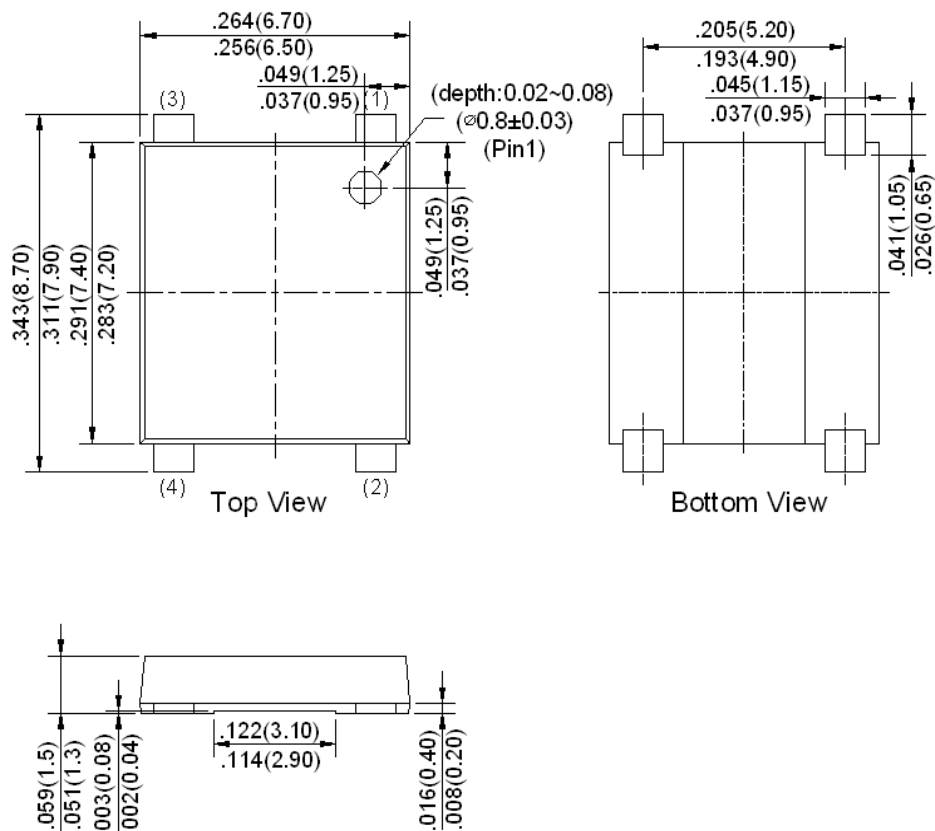


FIG.4: TYPICAL REVERSE CHARACTERISTICS

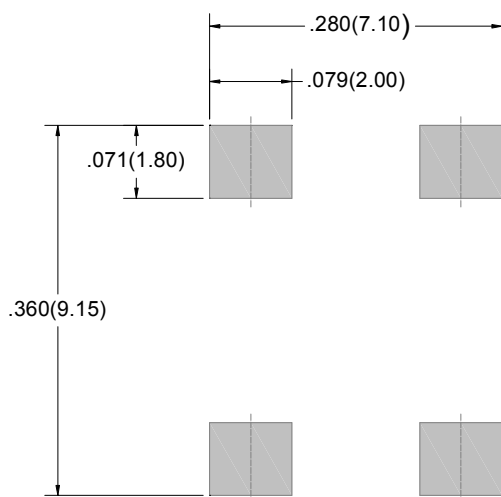


UMSB Package Outline Dimensions



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.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.