

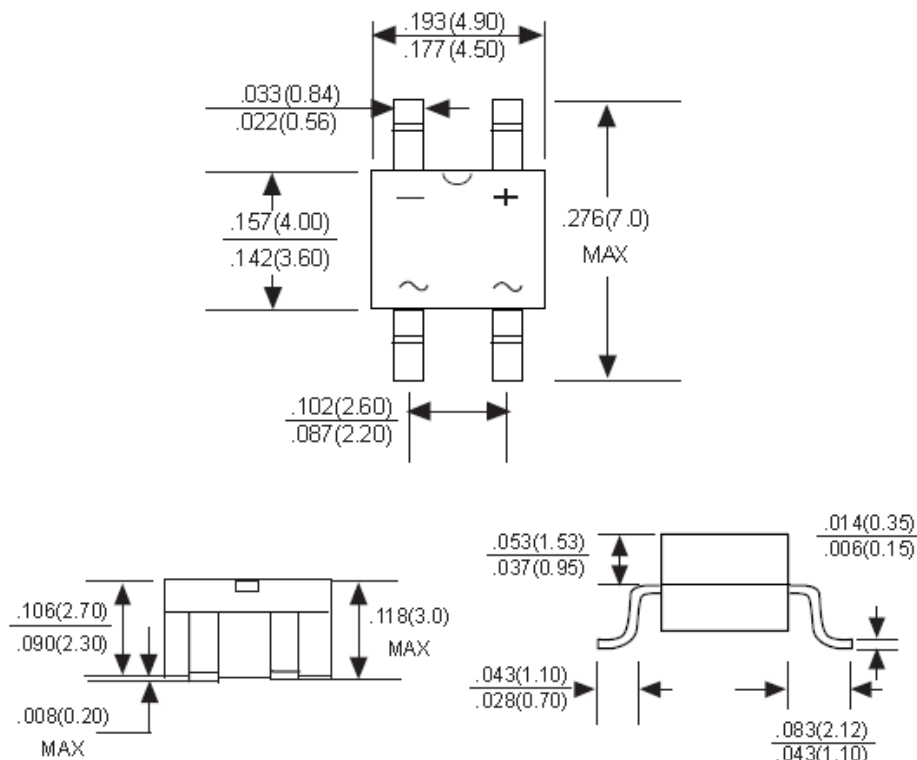
## RMB2S-RMB6S Miniature Glass Passivated Fast Recovery Surface Mount Bridge Rectifiers

**Features:**

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

**Mechanical Data:**

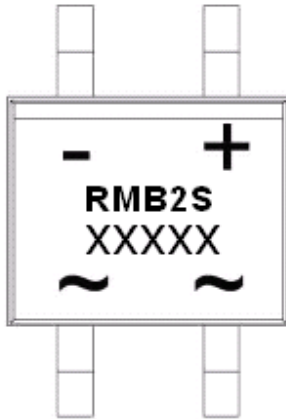
- **Case:** Molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Polarity symbols marked on case
- **Mounting Position:** Any
- **Weight:** 0.0044 ounce, 0.126 grams

**Mechanical Dimensions: In Inches/mm**

**MB-S**

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •

**Technical Data**  
**Data Sheet N1651, Rev. -**  
**Marking Diagram:**

*Green Products*



Where XXXXX is YYWWL

RMB2S = Part Name  
YY = Year  
WW = Week  
L = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information:**

Device	Package	Shipping
RMB2S-RMB6S	MB-S (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



**Maximum Ratings and Electrical Characteristics**

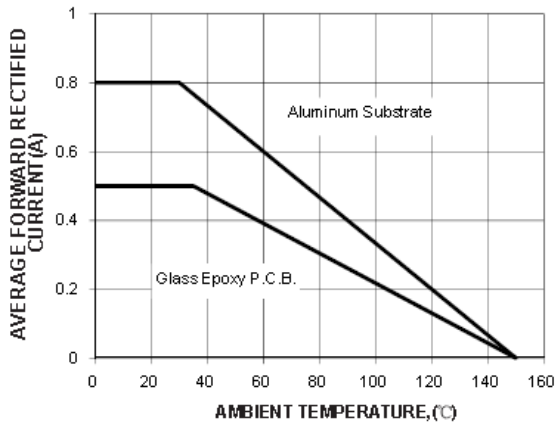
Rating at 25°C ambient temperature unless otherwise specified

Single Phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

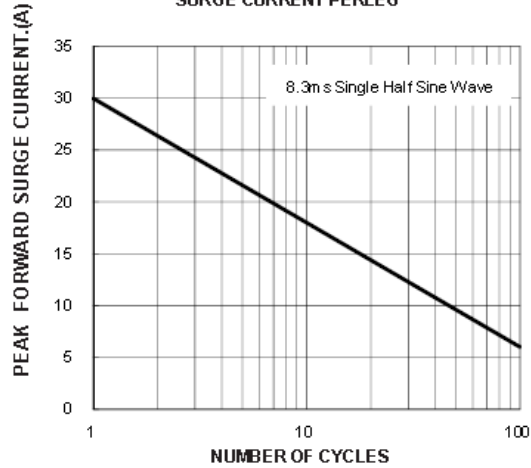
Characteristic	Symbol	RMB2S	RMB4S	RMB6S	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	
Maximum DC blocking voltage	$V_{DC}$	200	400	600	
Maximum average forward current 60Hz sine wave resistance load On glass-epoxy P.C.B. On aluminum substrate	$I_{F(AV)}$		0.5 0.8		A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$		30		A
Maximum instantaneous forward voltage drop (Note 1) @ $I_F = 0.4A$	$V_F$		1.0		V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	$I_R$		5 100		$\mu A$
Maximum reverse recovery time (Note 2)	$t_{rr}$		150		nS
Typical junction capacitance (per leg)	$C_j$		13		pF
Typical thermal resistance	$R_{\theta JA}$		85		$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$		-55 to +150		$^\circ C$

**Note:** 1. Pulse Test with PW=300us, 1% Duty Cycle  
2. Reverse Recovery Test Condition:  $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$

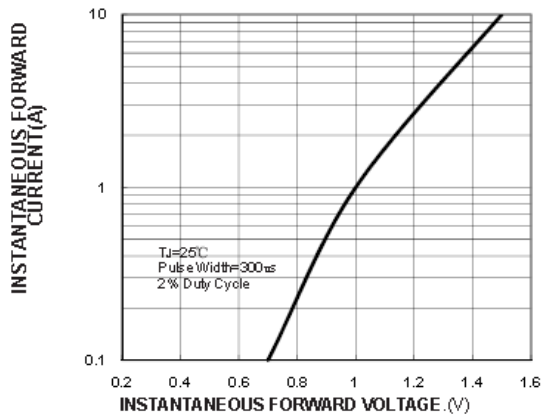
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT FOR**



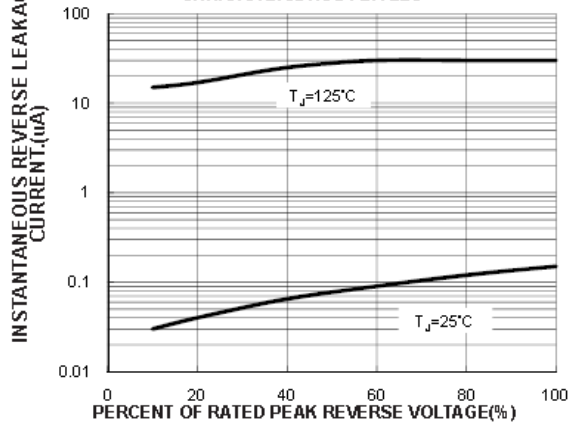
**FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



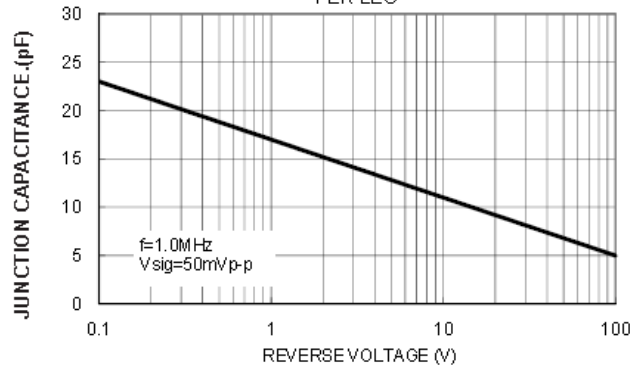
**FIG. 3- TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG**



**FIG. 4- TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG**



**FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG**





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