

# RMB2S - RMB4S

## Miniature Glass Passivated Fast Recovery Surface Mount Bridge Rectifiers

**PRV : 200 - 400 Volts**

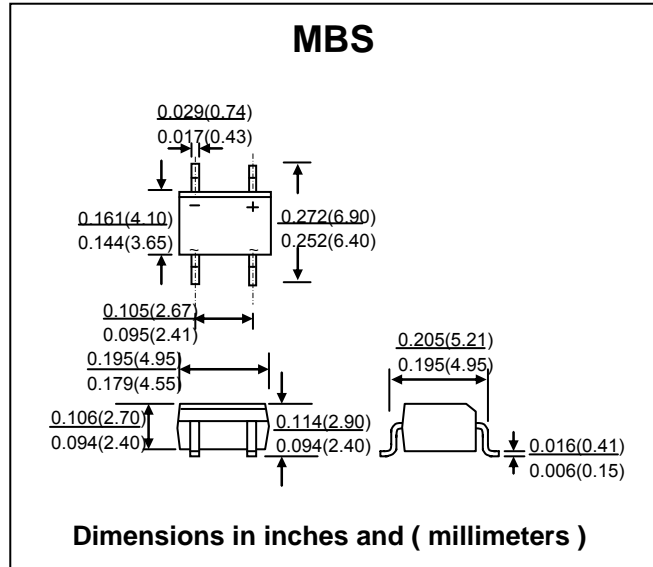
**Io : 0.5 Ampere**

### FEATURES :

- \* Glass passivated chip junctions.
- \* High surge overload rating : 35A peak
- \* Saves space on printed circuit boards.
- \* High temperature soldering guaranteed : 260 °C/10 seconds.
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Terminals : Plated Lead solderable per MIL-STD-750, Method 2026
- \* Polarity : Polarity symbols marked on body
- \* Mounting position : Any
- \* Weight : 0.22 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified  
60 Hz, resistive or inductive load

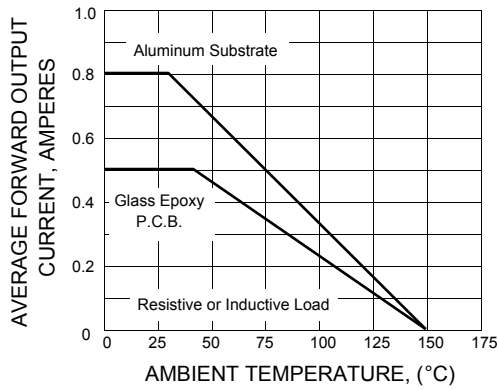
RATING	SYMBOL	RMB2S	RMB4S	UNIT
Device Marking Code		<b>2R</b>	<b>4R</b>	
Maximum Repetitive Reverse Voltage	$V_{RRM}$	200	400	V
Maximum RMS Voltage	$V_{RMS}$	140	280	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	V
Maximum Average Forward Output Rectified Current (See Fig.1)	$I_{F(AV)}$	0.5 <sup>(1)</sup> (on glass-epoxy P.C.B.) 0.8 <sup>(2)</sup> (on alimum substrate)		A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	30		A
Rating for fusing (t < 8.3 ms.)	$I^2t$	5.0		A <sup>2</sup> S
Maximum Instantaneous Forward Voltage per element at $I_F = 0.4$ A	$V_F$	1.25		V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	$I_R$	5.0		$\mu\text{A}$
	$I_{R(H)}$	100		$\mu\text{A}$
Maximum reverse recovery time at $I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{rr}=0.25\text{A}$	$T_{rr}$	150		ns
Typical Junction Capacitance per element	$C_j$	13 <sup>(3)</sup>		pF
Typical Thermal Resistance	$R_{\theta JA}$	85 <sup>(1)</sup>		$^\circ\text{C/W}$
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150		$^\circ\text{C}$

#### Notes :

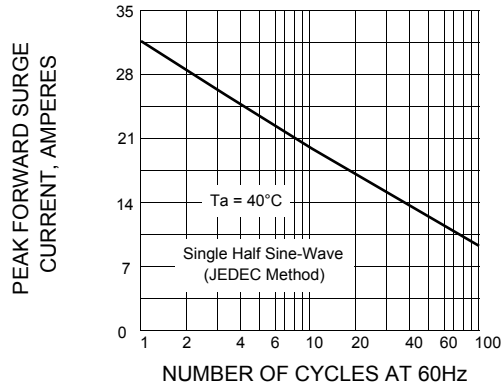
- (1) On glass epoxy P.C Board mounted on 0.5" x 0.5" (13mm x 13mm) Pads.
- (2) On aluminum substrate P.C.B. with an area 0.8" x 0.8" (20mm x 20mm) mounted on 0.5" x 0.5" (13mm x 13mm) Pads.
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

**RATING AND CHARACTERISTIC CURVES ( RMB2S - RMB4S )**

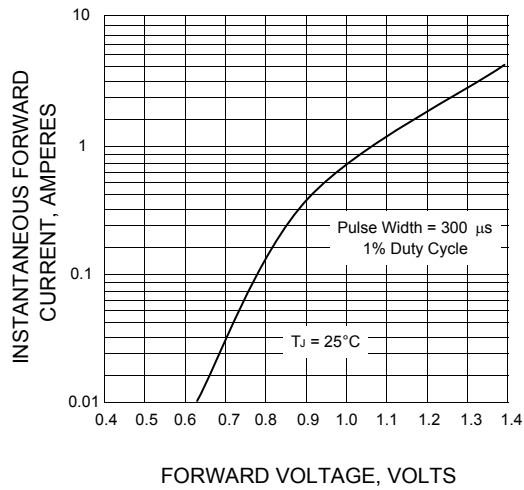
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**

