

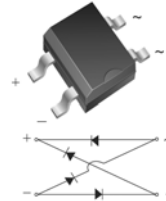


# RMB2S thru RMB4S

Miniature Glass Passivated Fast Recovery Surface Mount Bridge Rectifiers  
Reverse Voltage 200 to 400 Volts Forward Current 0.5 Ampere

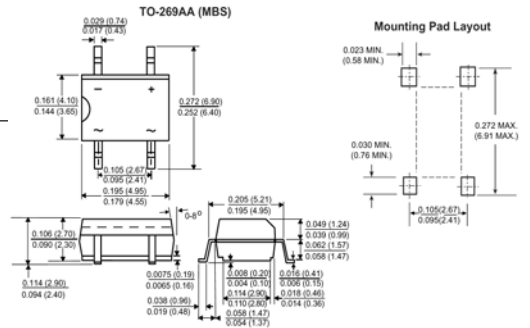
## Features

- ◆ Plastic package has UL Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ Saves space on printed circuit boards
- ◆ Fast recovery, low switching loss
- ◆ High temperature soldering guaranteed:  
260°C/10 seconds at 5 lbs. (2.3kg) tension



## Mechanical Data

- ◆ Case: Molded plastic body over passivated junctions
- ◆ Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Polarity symbols marked on body
- ◆ Mounting Position: Any
- ◆ Weight: 0.078 oz, 0.22g



Package outline dimensions in inches (millimeters)

## Maximum Ratings and Electrical Characteristics

( $T_A=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbols	RMB2S	RMB4S	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	Volts
Maximum RMS voltage	$V_{RMS}$	140	280	Volts
Maximum DC blocking voltage	$V_{DC}$	200	400	Volts
Maximum average forward output rectified current at $T_A=30^\circ\text{C}$ on glass-epoxy P.C.B. on aluminum substrate	$I_{F(AV)}$	0.5 <sup>(1)</sup> 0.8 <sup>(2)</sup>		Amp
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30.0		Amps
Rating for fusing ( $t < 8.3\text{ms}$ )	$Pt$	5.0		A <sup>2</sup> sec
Maximum instantaneous forward voltage drop per leg at 0.4A	$V_F$	1.0		Volt
Maximum DC reverse current at rated DC blocking voltage per leg $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	$I_R$	5.0 100		$\mu\text{A}$
Maximum reverse recovery time at $I_F=0.5\text{A}$ , $I_{RR}=1.0\text{A}$ , $I_{tr}=0.25\text{A}$	$t_{rr}$	150		nS
Typical thermal resistance per leg	$R_{\theta JA}$ $R_{\theta SA}$ $R_{\theta JL}$	85 <sup>(1)</sup> 70 <sup>(2)</sup> 20 <sup>(1)</sup>		$^\circ\text{C/W}$
Typical junction capacitance per leg at 4.0V, 1.0MHz	$C_J$	13		pF
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150		$^\circ\text{C}$

- Notes:**
1. On glass epoxy P.C.B. mounted on  $0.05 \times 0.05''$  (1.3 x 1.3mm) pads
  2. On aluminum substrate P.C.B. with an area of  $0.8 \times 0.8''$  (20 x 20mm) mounted on  $0.05 \times 0.05''$  (1.3 x 1.3mm) solder pad

# RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

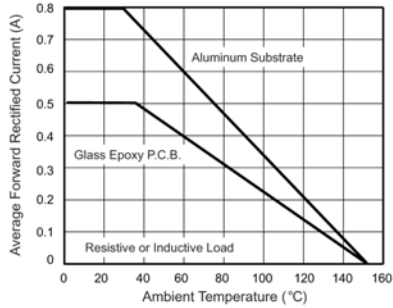


Figure 1. Maximum Forward Current Derating Curve

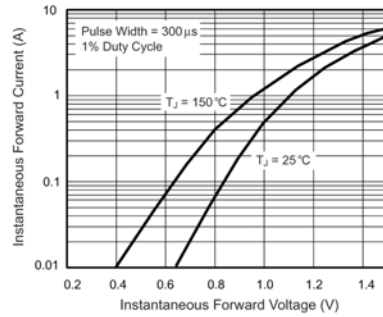


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

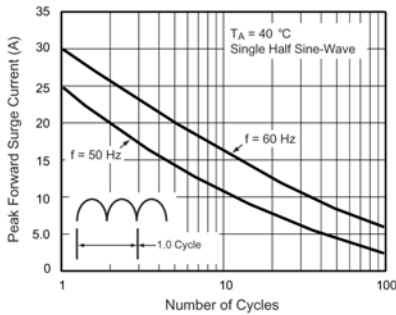


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

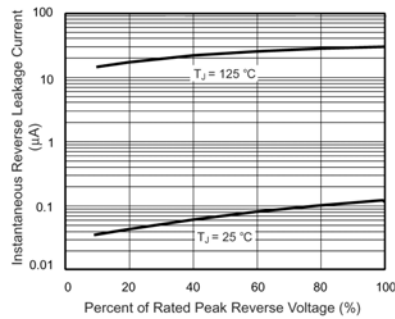


Figure 4. Typical Reverse Leakage Characteristics Per Leg

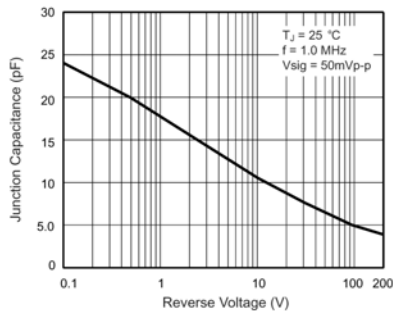


Figure 5. Typical Junction Capacitance Per Leg