



RMB2S thru RMB4S

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

Features

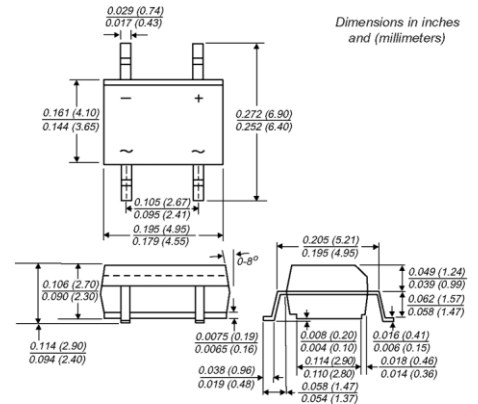
- ◆ Plastic package has UL Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ Saves space on printed circuit boards
- ◆ Fast recovery, low switching loss
- ◆ High temperature soldering guaranteed:
260°C/10 seconds at 5 lbs. (2.3kg) tension



TO-269AA (MBS)

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



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 ⁽¹⁾ 0.8 ⁽²⁾		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 ($t < 8.3\text{ms}$)	I^2t	5.0		A^2sec
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.0		Volt
Maximum DC reverse current at $T_A = 25^\circ\text{C}$ rated DC blocking voltage per leg $T_A = 125^\circ\text{C}$	I_R	5.0 100		μA
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 thermal resistance per leg	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	85 ⁽¹⁾ 70 ⁽²⁾ 20 ⁽¹⁾		$^\circ\text{C/W}$
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 $0.05 \times 0.05"$ ($1.3 \times 1.3\text{mm}$) pads
 2. On aluminum substrate P.C.B. with an area of $0.8" \times 0.8"$ ($20 \times 20\text{mm}$) mounted on $0.05 \times 0.05"$ ($1.3 \times 1.3\text{mm}$) solder pad

RATINGS AND CHARACTERISTIC CURVES

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

Fig. 1 – Maximum Forward Current Derating Curve

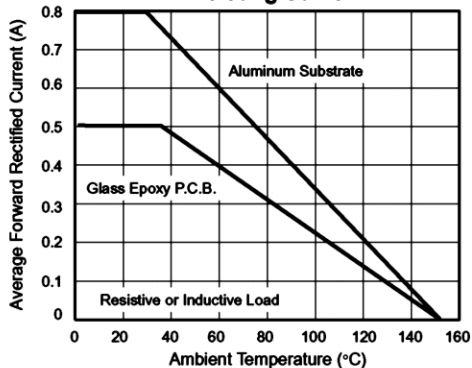


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

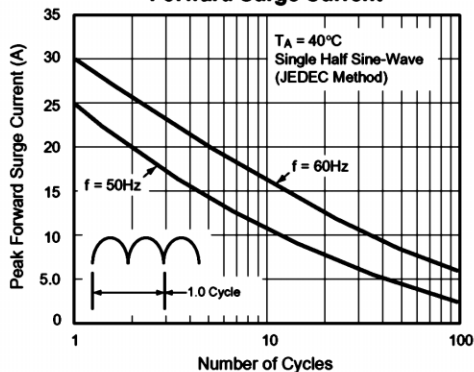


Fig. 3 – Typical Instantaneous Forward Characteristics

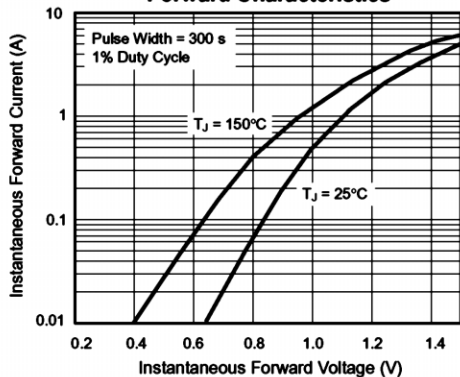


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

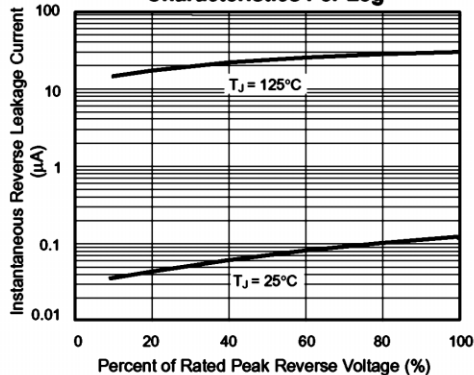


Fig. 5 – Typical Junction Capacitance

