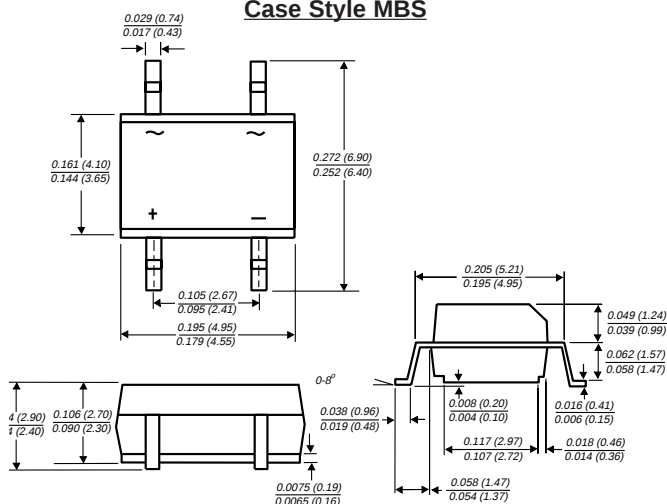


RMB2S THRU RMB4S

MINIATURE GLASS PASSIVATED SINGLE-PHASE SURFACE MOUNT FAST RECOVERY BRIDGE RECTIFIER

Reverse Voltage - 200 to 400 Volts Forward Current - 0.5 Ampere

Case Style MBS



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL recognized under Component Index, file number E54214
- ◆ Glass passivated chip junctions
- ◆ High surge overload rating: 35A peak
- ◆ Saves space on printed circuit boards
- ◆ Fast recovery, low loss switching
- ◆ 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: 0.0078 ounce, 0.22 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	RMB2S	RMB4S	UNITS
Device marking code		R2	R4	
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 $T_A=30^\circ\text{C}$	$I_{(AV)}$	0.5 0.8		Amp
- on glass-epoxy P.C.B. (NOTE 1)				
- on aluminum substrate (NOTE 2)				
Peak forward surge current 8.3msec 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 ² sec
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	1.25		Volts
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		
Maximum reverse recovery time (NOTE 3)	t_{rr}	150		ns
Typical junction capacitance per leg (NOTE 4)	C_J	13.0		pF
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JA}$	85.0		$^\circ\text{C/W}$
(NOTE 2)	$R_{\theta JA}$	70.0		
(NOTE 1)	$R_{\theta JL}$	20.0		
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 x 0.05" (1.3 x 1.3mm) pads

(2) On aluminum substrate P.C.B. with an area of 0.8 x 0.8" (2.0 x 2.0mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

(3) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(4) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

RATINGS AND CHARACTERISTIC CURVES RMB2S THRU RMB4S

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

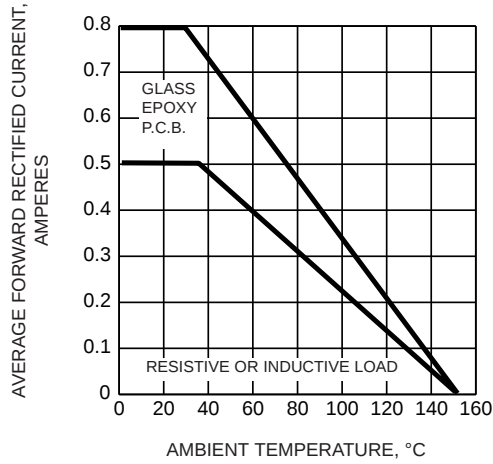


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

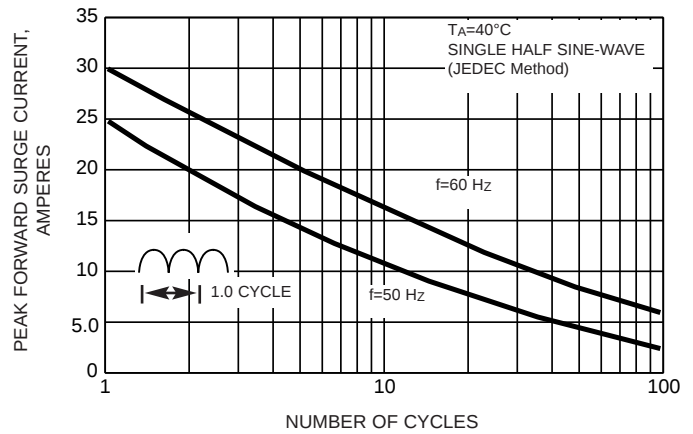


FIG. 3 - TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

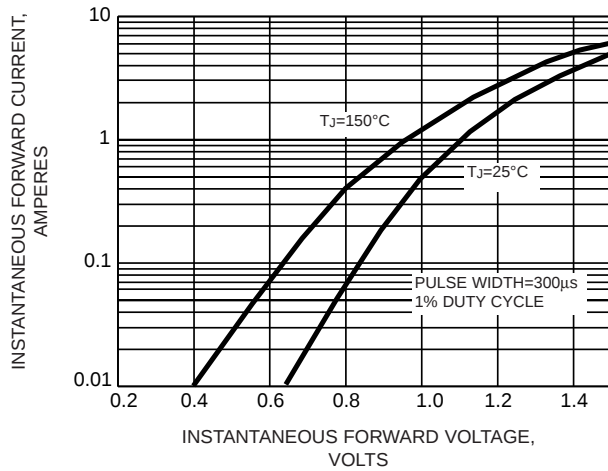


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

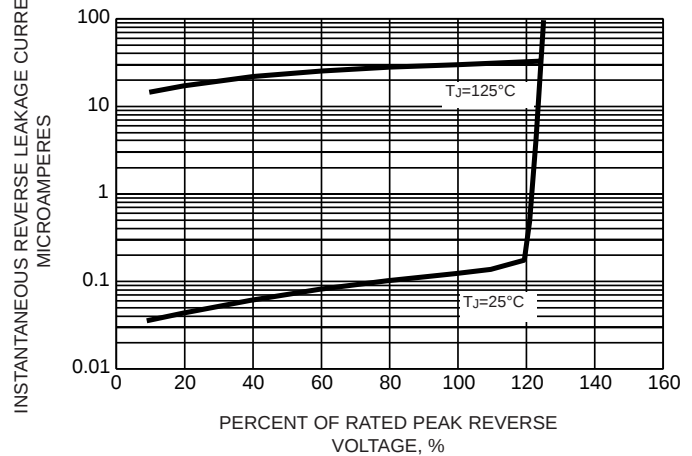


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

