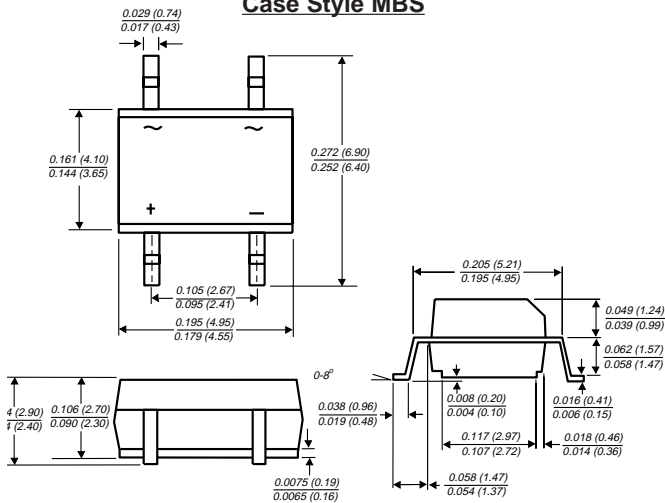


# RMB2S THRU RMB4S

## 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.

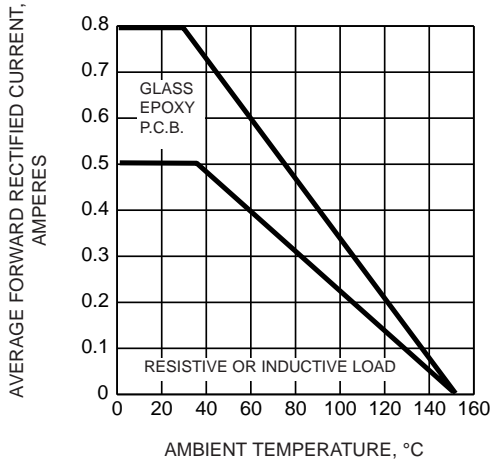
	SYMBOLS	RMB2S	RMB4S	UNITS
Device marking code		R2	R4	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	Volts
Maximum RMS voltage	V <sub>RMS</sub>	140	280	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	Volts
Maximum average forward output rectified current at T <sub>A</sub> =30°C	I <sub>(AV)</sub>		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 <sub>FSM</sub>		30.0	Amps
Rating for fusing (t<8.3ms)	I <sup>2</sup> t		5.0	A <sup>2</sup> sec
Maximum instantaneous forward voltage drop per leg at 0.4A	V <sub>F</sub>		1.25	Volts
Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>R</sub>		5.0 100	
				T <sub>A</sub> =25°C T <sub>A</sub> =125°C
Maximum reverse recovery time (NOTE 3)	t <sub>rr</sub>		150	ns
Typical junction capacitance per leg (NOTE 4)	C <sub>J</sub>		13.0	pF
Typical thermal resistance per leg	R <sub>θJA</sub> R <sub>θJA</sub> R <sub>θJL</sub>		85.0 70.0 20.0	°C/W
				(NOTE 1) (NOTE 2) (NOTE 1)
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>		-55 to +150	°C

**NOTES:**

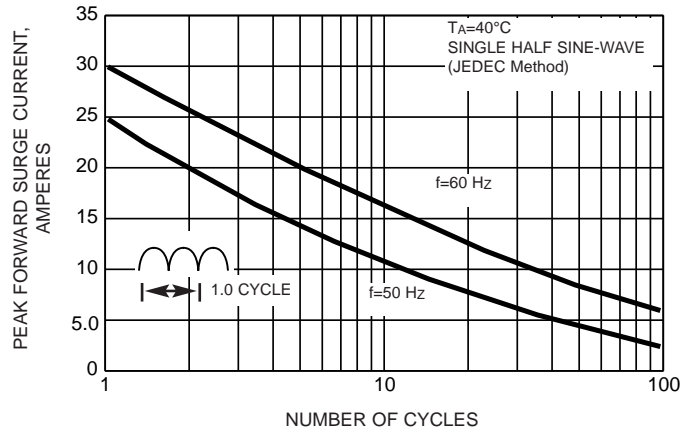
- (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads
- (2) On aluminum substrate P.C.B. with an area of 0.8 x 0.8" (2.0 x 2.0mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad
- (3) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A
- (4) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

# RATINGS AND CHARACTERISTIC CURVES RMB2S THRU RMB4S

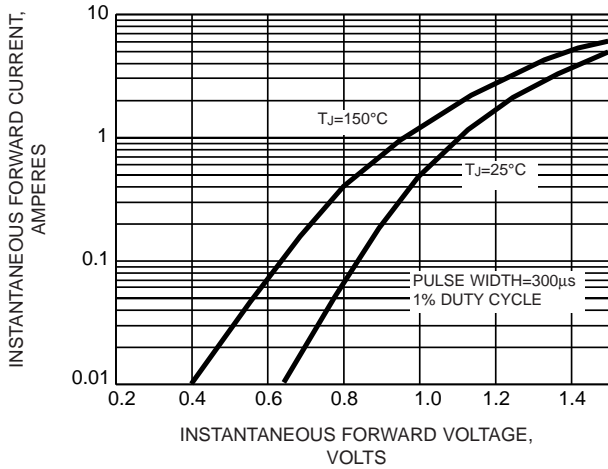
**FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



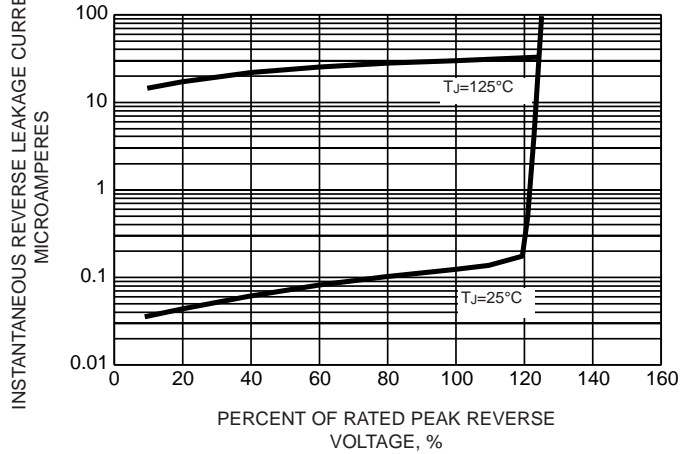
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



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



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



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

