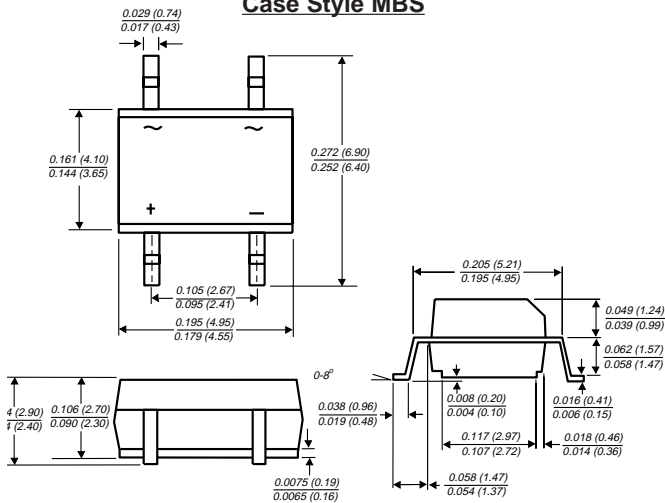


RMB2S THRU RMB4S

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°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<8.3ms)	I ² t		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 rated DC blocking voltage per leg	I _R		5.0 100	
				T _A =25°C
				T _A =125°C
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	R _{θJA} R _{θJA} R _{θJL}		85.0 70.0 20.0	°C/W
				(NOTE 1)
				(NOTE 2)
				(NOTE 3)
Operating junction and storage temperature range	T _J , T _{STG}		-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_F=0.5A, I_R=1.0A, I_{rr}=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

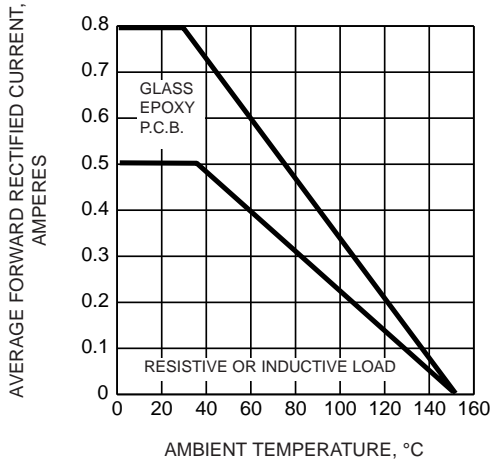


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

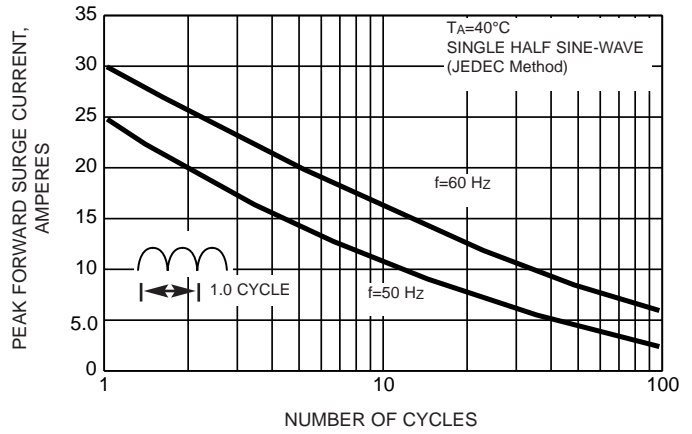


FIG. 3 - TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

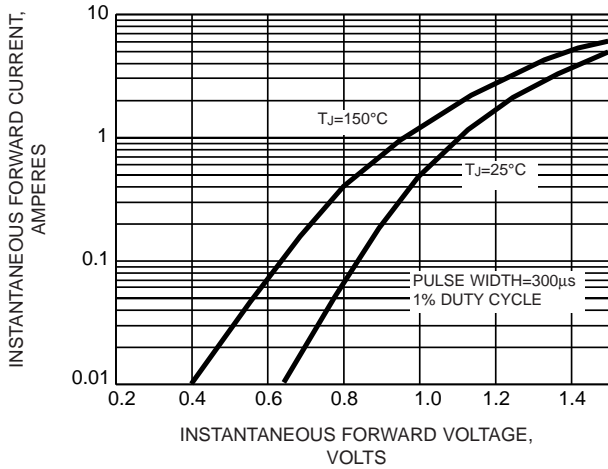


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

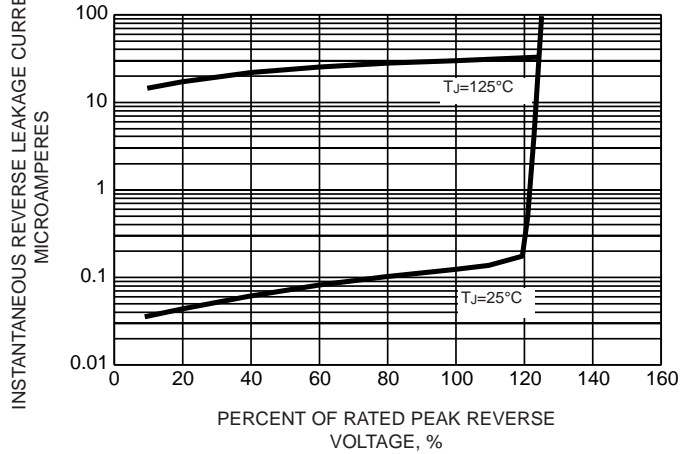


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

