



Single Phase Glass Passivated Fast Recovery Bridge Rectifiers

Reverse Voltage: 50V to 1000V
Forward Current: 0.8 Amp

Features

- Glass passivated chip junction
- Ideal for automated placement
- Low leakage current
- High forward surge capability
- Moisture sensitivity level: level 1, per J-STD-020

Mechanical Data

• Package: MBF

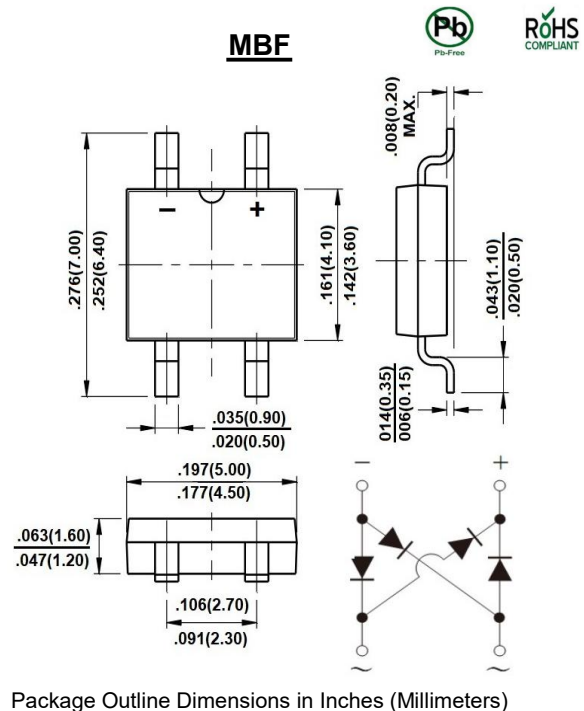
Molding compound meets UL 94 V-0 flammability rating

- #### • Terminals: Matte tin plated leads,
- solderable per MIL-STD-750, Method 2026

- #### • Polarity: Symbol marking on body

Typical Applications

Suitable for AC to DC bridge full wave rectification for SMPS, LED lighting, adapter, battery charger, home appliances, office equipment, and telecommunication applications.



Maximum Ratings and Electrical Characteristics (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions		SYM.	RMB05F	RMB1F	RMB2F	RMB4F	RMB6F	RMB8F	RMB10F	Unit
Device marking code			RMB05F	RMB1F	RMB2F	RMB4F	RMB6F	RMB8F	RMB10F	
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current (see Fig. 1)	On glass-epoxy P.C.B (Note 1)	I _{O(AV)}	0.5							A
	On aluminum substrate (Note 2)		0.8							
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed On Rated Load		I _{FSM}	30							A
Operating junction range		T _J	-55 to+150							℃
Storage temperature range		T _{STG}	-55 to+150							℃

Thermal Characteristics (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions		SYM.	RMB05F	RMB1F	RMB2F	RMB4F	RMB6F	RMB8F	RMB10F	Unit
Maximum Thermal Resistance per Leg, Junction To Lead (Note 1)		R _{θJL}	25							°C/W
Maximum Thermal Resistance per Leg, Junction To Ambient (Note 1)		R _{θJA}	62.5							°C/W

Electrical Characteristics (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions		SYM.	RMB05F	RMB1F	RMB2F	RMB4F	RMB6F	RMB8F	RMB10F	Unit
Maximum reverse recovery time	IF=0.5A, IR=-1.0A, IRR=-0.25A	Trr	150				250	500		ns
Maximum Instantaneous Forward Voltage per diode	IF= 0.8A	V _{FM}	1.30							V
Maximum DC reverse current at rated DC blocking voltage per diode	TA = 25℃	I _R	5							μA
	TA = 125℃		100							

Notes:

1. Units mounted on glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads.
2. Units mounted on aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad.

Rating and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED

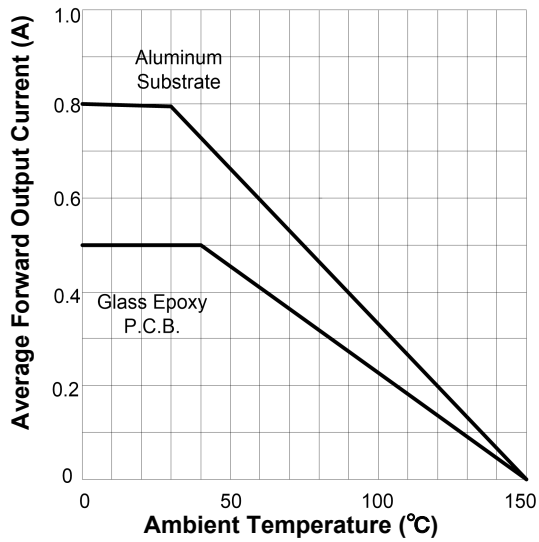


FIG. 2- -MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT Per Diode

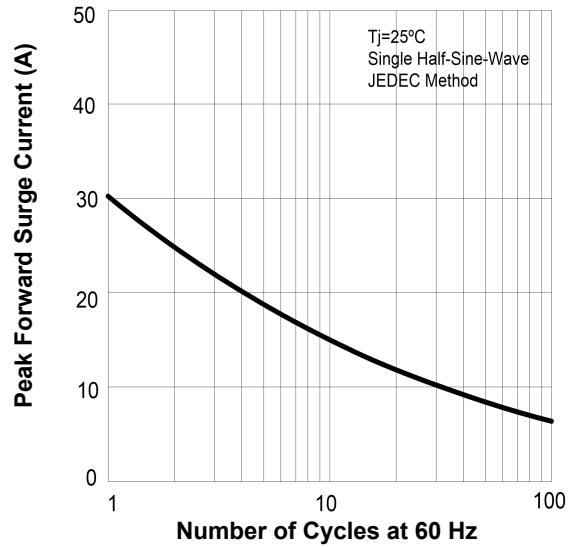


FIG. 3- TYPICAL FORWARD VOLTAGE

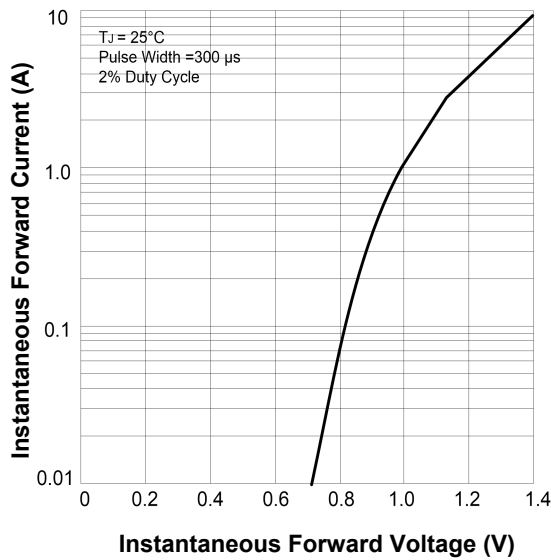
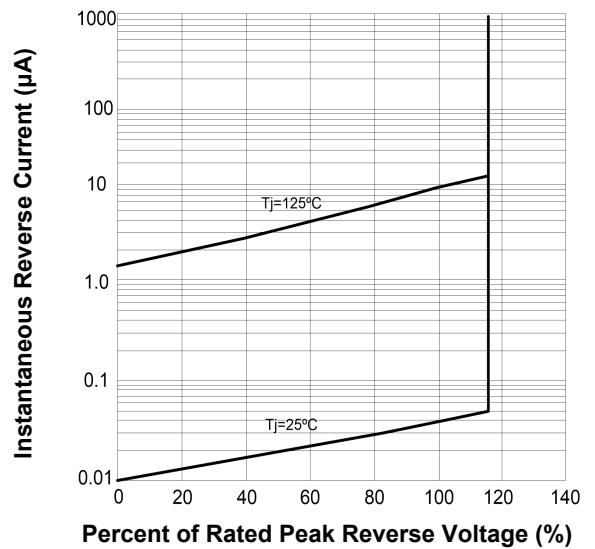
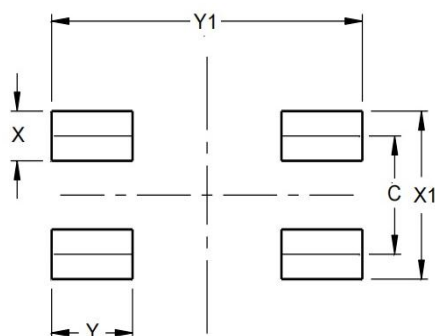


FIG. 4- TYPICAL REVERSE LEAKAGE CHARACTERISTICS



The curve above is for reference only.

Recommended Pad Layout


SYMBOL	Unit(mm)	Unit(inch)
C	2.5	0.098
X	1.2	0.047
X1	3.55	0.140
Y	1.88	0.074
Y1	7.2	0.283

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