

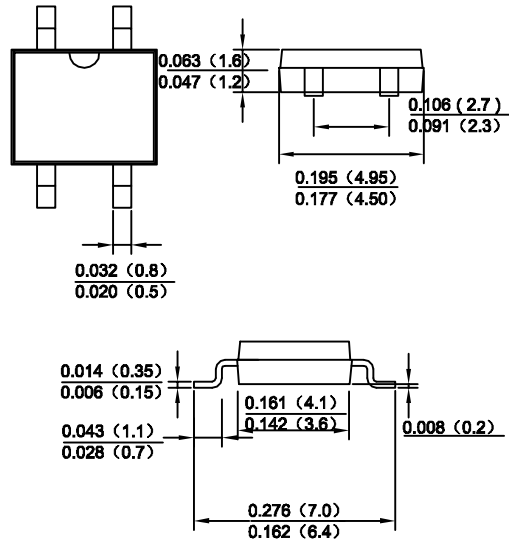
Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: MB-F, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,

MBF



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	EMB1F	EMB2F	EMB3F	EMB4F	EMB6F	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}						V
Working Peak Reverse Voltage	V_{RWM}	100	200	300	400	600	
DC Blocking Voltage	V_{DC}						
RMS Reverse Voltage	V_{RMS}	70	140	210	280	420	V
Average Rectified Output Current (Note 1)@ $T_A=40^\circ C$ (Note 2)@ $T_A=40^\circ C$	I_O			0.5 0.8			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}			30			A
Forward Voltage per element @ $I_F=0.8A$	V_{FM}	0.95		1.25		1.7	V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R			5.0 500			μA
Maximum reverse recovery time (Note 3)	T_{RR}			35			nS
Typical Junction Capacitance per leg (Note4)	C_J			25			pF
Typical Thermal Resistance per leg	$R_{\theta JA}$			60			$^\circ C/W$
	$R_{\theta JL}$			16			
Operating and Storage Temperature Range	T_J, T_{STG}			-55to+150			$^\circ C$

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2. Mounted on aluminum substrate PC board with 1.3mm² 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 4.0V D.C.

