

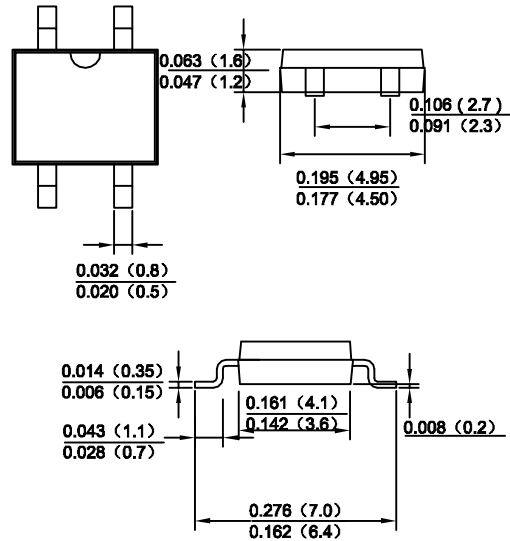
Features

- 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	EMB1FU	EMB2FU	EMB3FU	EMB4FU	EMB6FU	UNITS	
Peak Repetitive Reverse Voltage	V_{RRM}							
Working Peak Reverse Voltage	V_{RWM}	100	200	300	400	600	V	
DC Blocking Voltage	V_{DC}							
RMS Reverse Voltage	V_{RMS}	70	140	210	280	420	V	
Maximum average forward rectified current @ $T_A=40^\circ\text{C}$	I_O	1.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35						A
Forward Voltage per element @ $I_F=1.0\text{A}$	V_{FM}	0.95		1.25		1.7	V	
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 500						μA
Maximum reverse recovery time (Note 1)	T_{RR}	35						nS
Typical Junction Capacitance per leg	C_J	25						pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	60						$^\circ\text{C/W}$
	$R_{\theta JL}$	16						
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150						$^\circ\text{C}$

Note:1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B

with 0.5×0.5"(13×13mm)copper pads.

