

UMB1FU THRU UMB10FU

SINGLE PHASE 1.0AMP ULTRA FAST GLASS PASSIVATED BRIDGE RECTIFIER

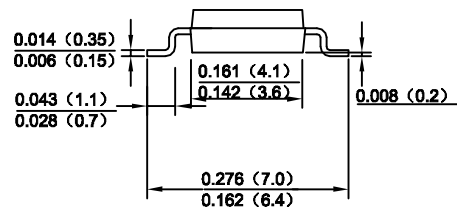
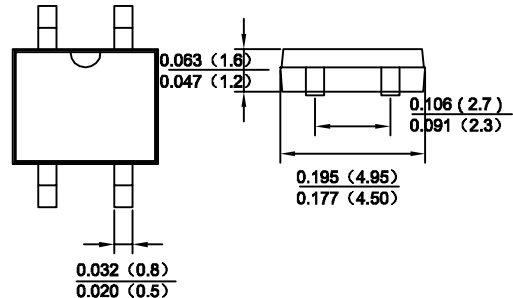
Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-35A peak
- 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	UMB1FU	UMB2FU	UMB4FU	UMB6FU	UMB8FU	UMB10FU	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}							
Working Peak Reverse Voltage	V_{RWM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_{DC}							
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@ $T_A=40^\circ C$	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 @ $I_F=1.0A$	V_{FM}	1.0		1.3		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 2)	T_{RR}	50			75			ns
Typical Junction Capacitance per leg (Note3)	C_J	13						pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	70						$^\circ C/W$
	$R_{\theta JL}$	20						
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. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

