

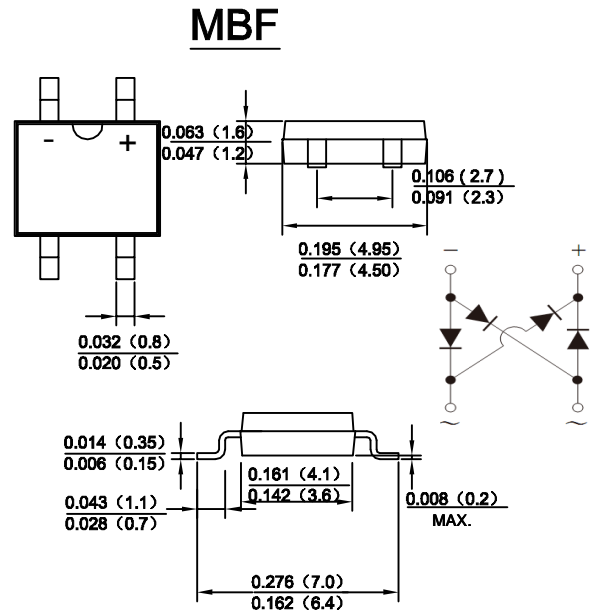


### Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-30A 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,



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	UMB1F	UMB2F	UMB4F	UMB6F	UMB8F	UMB10F	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$							
DC Blocking Voltage	$V_{DC}$							
RMS Reverse Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@Tc=100°C (Note 2)@Tc=100°C	$I_F(AV)$	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
$I^2t$ Rating for Fusing (t < 8.3ms)	$I^2t$	3.735						A <sup>2</sup> s
Forward Voltage per element @IF=1.0A	$V_{FM}$	1.0	1.3	1.7				V
Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C	$I_R$	5.0 200						uA
Maximum reverse recovery time (Note 3)	$T_{RR}$	50			75			ns
Typical Junction Capacitance per leg (Note4)	$C_J$	13						pF
Typical Thermal Resistance per leg	$R_{\theta JA}$	60						°C/W
	$R_{\theta JL}$	16						
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150						°C

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> 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.

