

### GLASS PASSIVATED ULTRA FAST RECOVERY BRIDGE RECTIFIERS

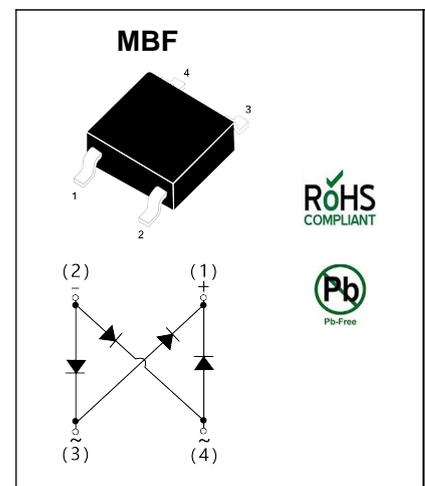
Voltage Range - 200 to 1000 Volts    Current - 0.5/0.8 Ampere

#### Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°C/10 second at 5 lbs., (2.3kg) tension
- Small size, simple installation
- Leads solderable per MIL-STD-202, Method 208
- High surge current capability
- Glass passivated chip junction
- Glass compound (halogen & Sb<sub>2</sub>O<sub>3</sub> free)

#### Mechanical Data

- Case: Molded plastic body
- Terminals: Plated lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Mounting Position: Any



#### Specification

#### Maximum Rating And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

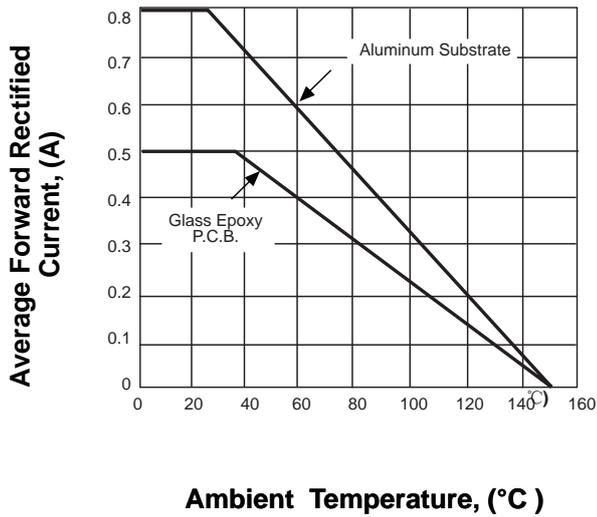
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

	SYMBOLS	UMB2F	UMB4F	UMB6F	UMB8F	UMB10F	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum average forward rectified current On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)	I <sub>F(AV)</sub>	0.5 0.8					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30					A
Maximum instantaneous forward voltage drop per leg at 0.4A	V <sub>F</sub>	1.0	1.4	1.7			V
Maximum DC reverse current    T <sub>A</sub> =25°C at rated DC blocking voltage    T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 500					uA uA
Typical thermal resistance(NOTE 3)	R <sub>θJL</sub> R <sub>θJA</sub>	30 88					°C/W
Maximum reverse recovery time    (NOTE 4)	t <sub>rr</sub>	50		75			ns
Operating temperature range	T <sub>J</sub>	-55 to +150					°C
storage temperature range	T <sub>STG</sub>	-55 to +150					°C

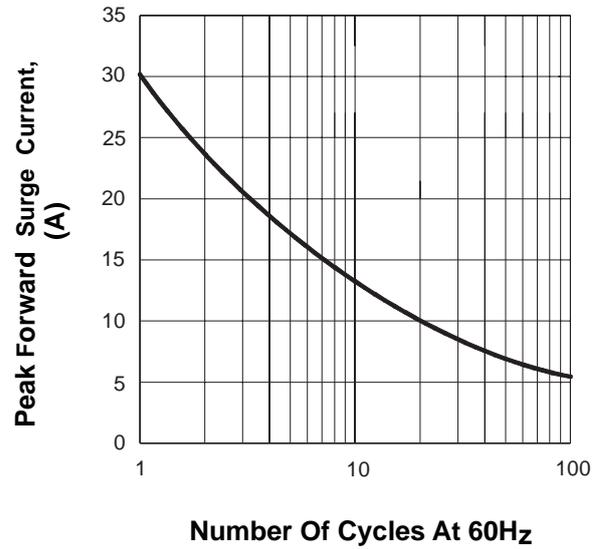
NOTES: 1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads.  
 2. On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05x0.05"(1.3x1.3mm) solder pad.  
 3. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2x0.2"(5x5mm) copper pads.  
 4. Reverse recovery condition I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.

### Ratings and characteristic curves UMB2F thru UMB10F

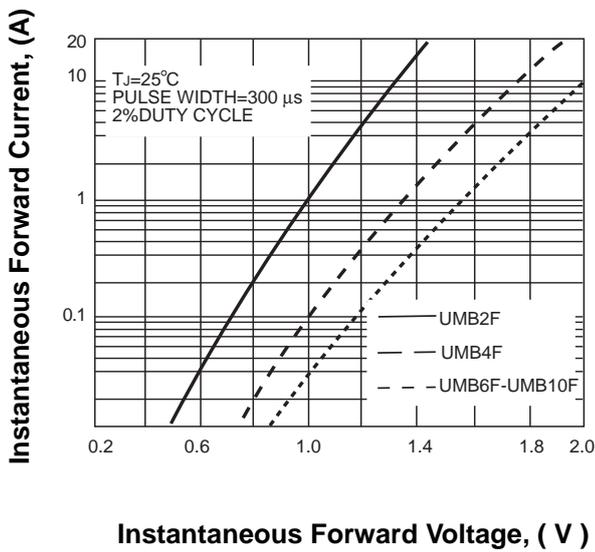
**FIG.1 FORWARD DERATING CURVE**



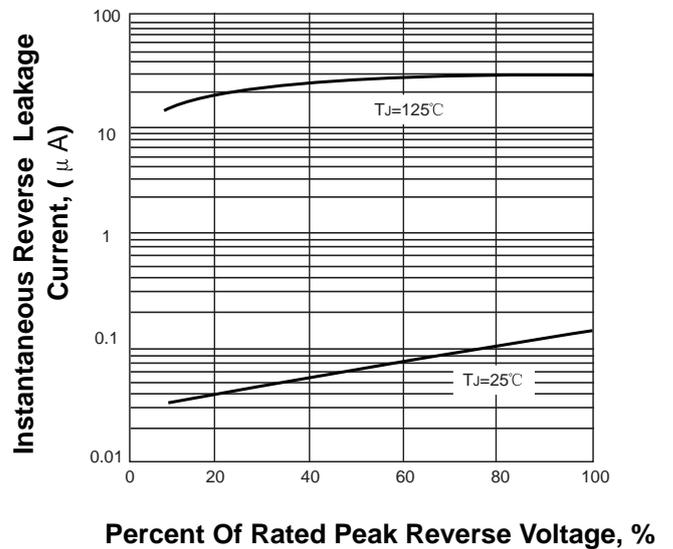
**FIG.2 PEAK FORWARD SURGE CURRENT**



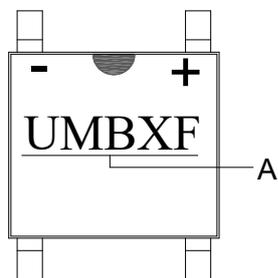
**FIG.3 TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 TYPICAL REVERSE CHARACTERISTICS**

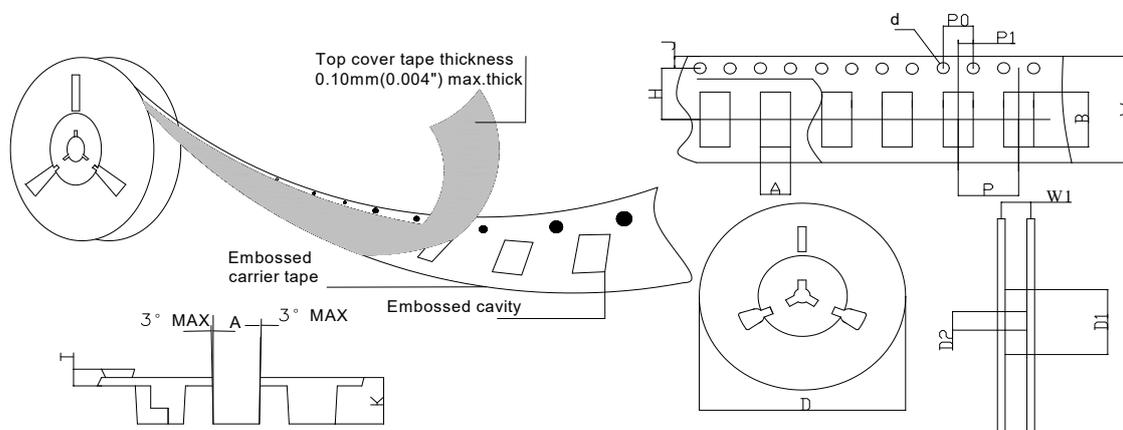


### 1、Marking



SYMBOL	Explanation
A	Product Name

### 2、Packaging



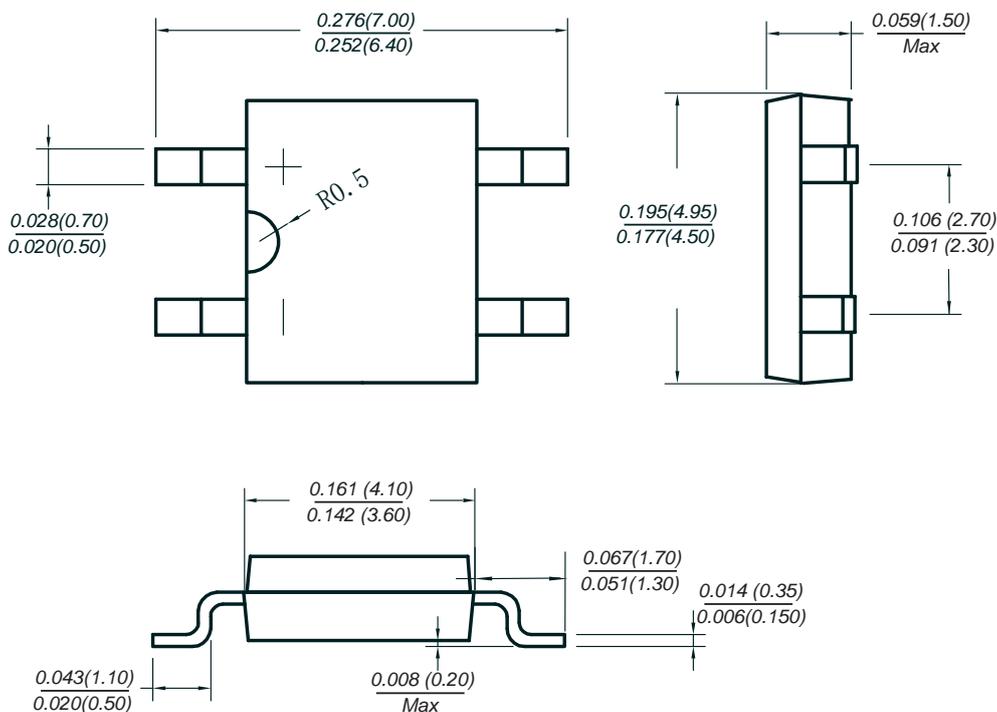
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	MBF	ITEM	SYM BOL	MBF
Carrier width	A	5.15(0.203)Max	Carrier depth	K	2.88(0.113)Typ
Carrier length	B	7.25(0.285)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(2.913)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.50(0.217)Typ			

### 3、Ordering Information

Part Number	Compliance	Case	Packaging
UMBXF	Standard	MBF	5000/Tape & Reel

### Dimension

#### MBF



*Dimensions in inches and (millimeters)*

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