

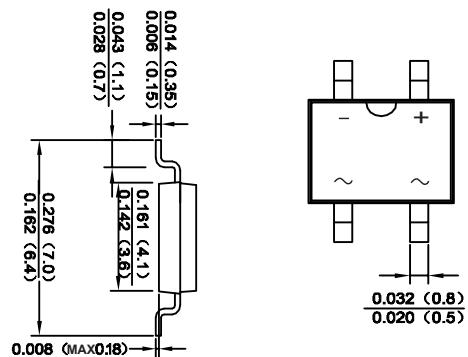


## GLASS PASSIVATED SUPER FAST RECOVERY BRIDGE RECTIFIERS

**Features**

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability
- ◆ Glass passivated chip junction

**MBF**

**Mechanical Data**

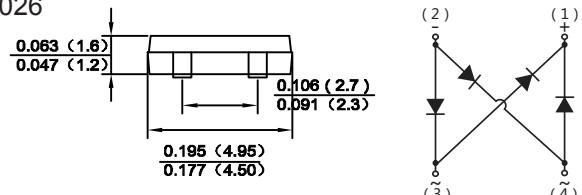
**Case :** JEDEC MBF Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.0026 ounce, 0.075 grams

**Maximum Ratings And Electrical Characteristics**

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	SYMBOLS	MDD EMB2F	MDD EMB4F	MDD EMB6F	MDD EMB8F	UNITS
Marking Code						
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	200	400	600	V
Maximum RMS voltage	V <sub>RMS</sub>	70	140	280	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	100	200	400	600	V
Maximum average forward rectified current	I <sub>F(AV)</sub>			0.5 0.8		A
On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)						
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>			30		A
Maximum instantaneous forward voltage drop per leg at 0.4A	V <sub>F</sub>		0.95	1.25	1.7	V
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	I <sub>R</sub>		5 500			uA
Typical thermal resistance(NOTE 3)	R <sub>θJL</sub> R <sub>θJA</sub>		30	88		°C/W
Maximum reverse recovery time (NOTE 4)	trr		35			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

FIG.1 FORWARD DERATING CURVE

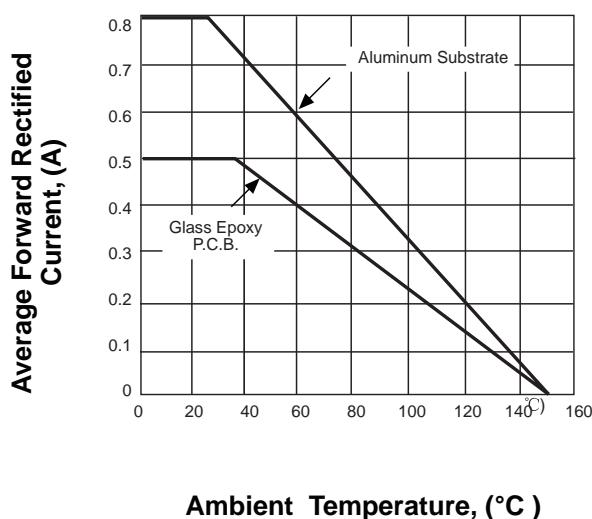


FIG.2 PEAK FORWARD SURGE CURRENT

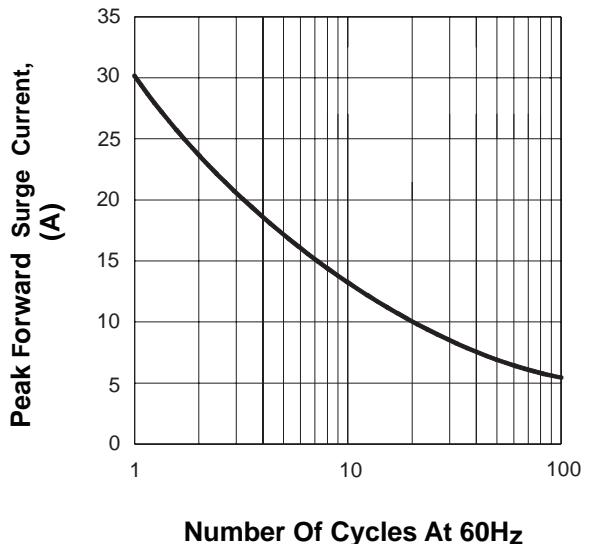


FIG.3 TYPICAL FORWARD CHARACTERISTICS

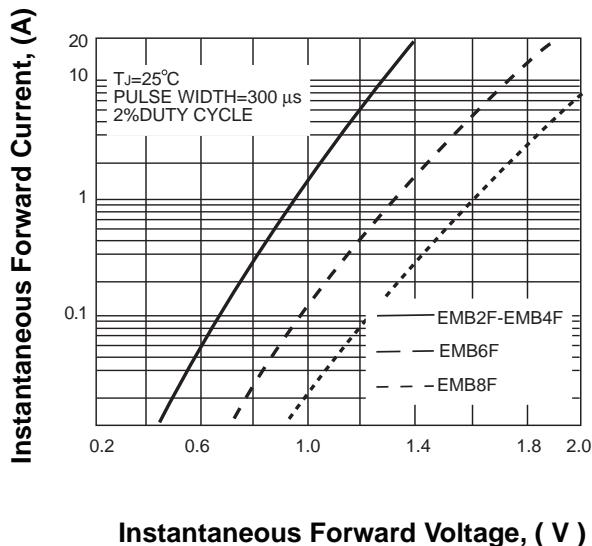
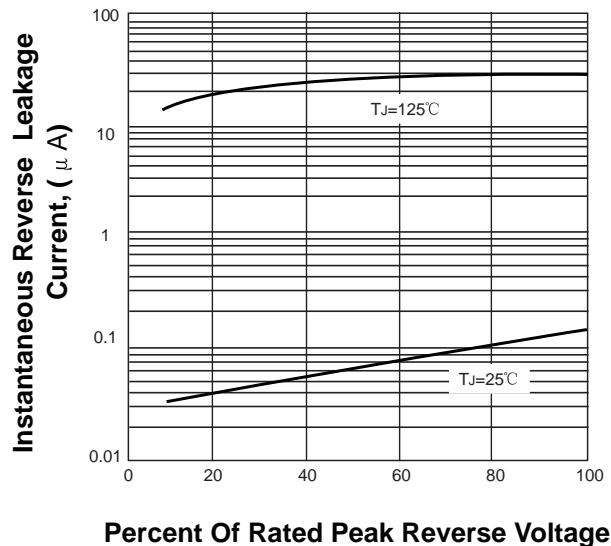


FIG.4 TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.