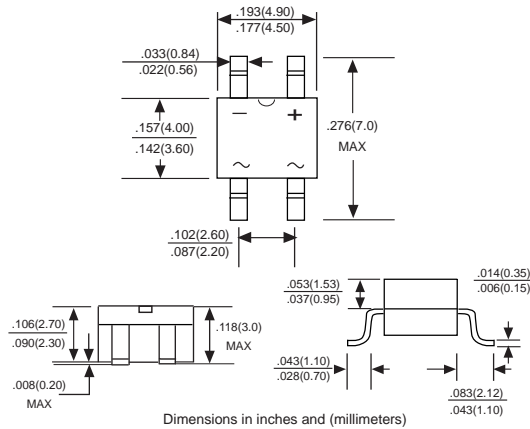




# EMB2S THRU EMB8S

GLASS PASSIVATED SUPER FAST RECOVERY BRIDGE RECTIFIERS  
Voltage Range - 200 to 600Volts Current - 0.5/0.8 Ampere

MBS



Dimensions in inches and (millimeters)



## FEATURES

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

## MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting Position:** Any

## MAXIMUM RATINGS 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%.

MDD Catalog Number	SYMBOLS	EMB2S	EMB4S	EMB6S	EMB8S	UNITS
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 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>	0.95		1.25	1.7	V
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C 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>		28 85			°C/W
Maximum reverse recovery time (NOTE 4)	t <sub>rr</sub>		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.

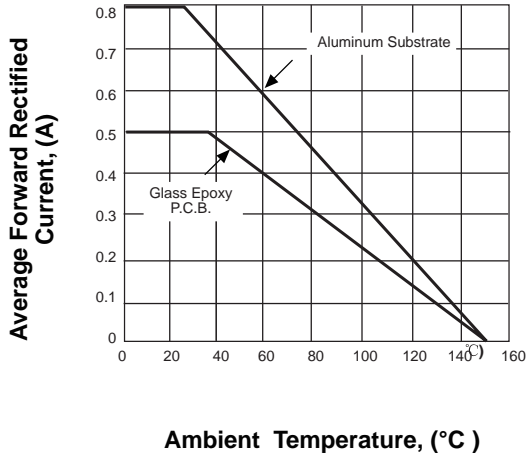
2. On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad.

3. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

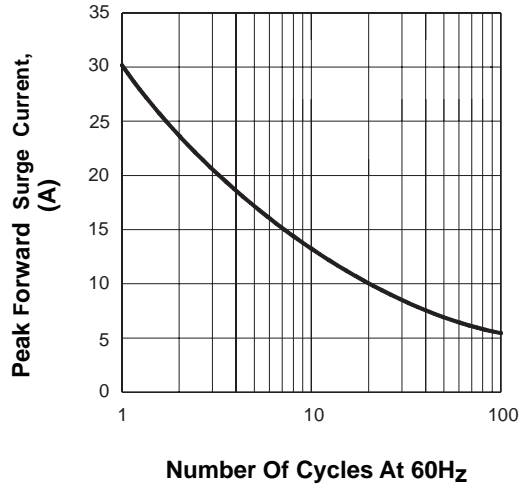
4. Reverse recovery condition I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.

# RATINGS AND CHARACTERISTIC CURVES EMB2S THRU EMB8S

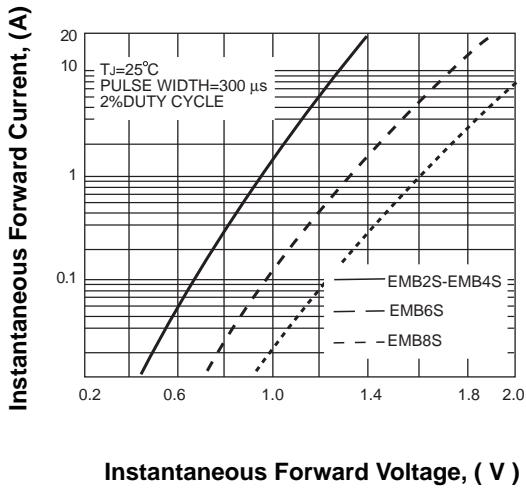
**FIG.1 FORWARD DERATING CURVE**



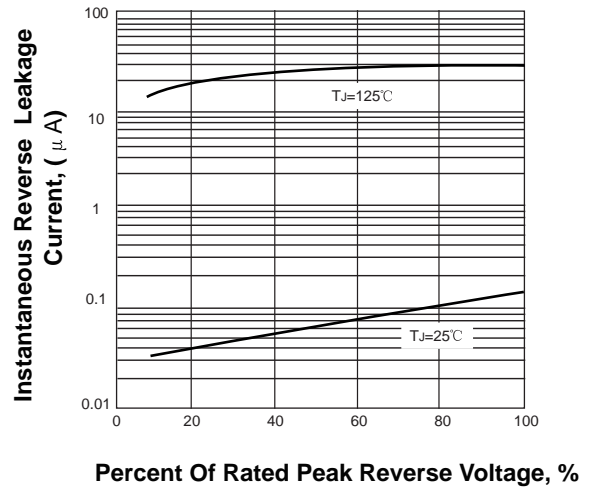
**FIG.2 PEAK FORWARD SURGE CURRENT**



**FIG.3 TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 TYPICAL REVERSE CHARACTERISTICS**



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!