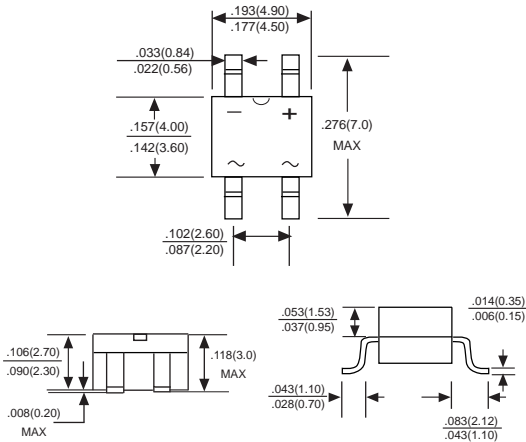


EMB2S THRU EMB8S

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&Sb₂O₃ 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%.

	SYMBOLS	EMB2S	EMB4S	EMB6S	EMB8S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	V
Maximum average forward rectified current						
On glass-epoxy P.C.B.(Note1)	$I_{F(AV)}$		0.5			A
On aluminum substrate(Note2)			0.8			
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}		30			A
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	0.95		1.25	1.7	V
Maximum DC reverse current						
at rated DC blocking voltage	I_R		5.0			uA
			500			uA
Typical thermal resistance(NOTE 3)	$R_{\theta JL}$		28			°C/W
	$R_{\theta JA}$		85			
Maximum reverse recovery time (NOTE 4)	t_{rr}		35			ns
Operating temperature range	T_J		-55 to +150			°C
storage temperature range	T_{STG}		-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 $I^F=0.5A, I^R=1.0A, I_{rr}=0.25A$.

RATINGS AND CHARACTERISTIC CURVES EMB2S THRU EMB8S

FIG.1 FORWARD DERATING CURVE

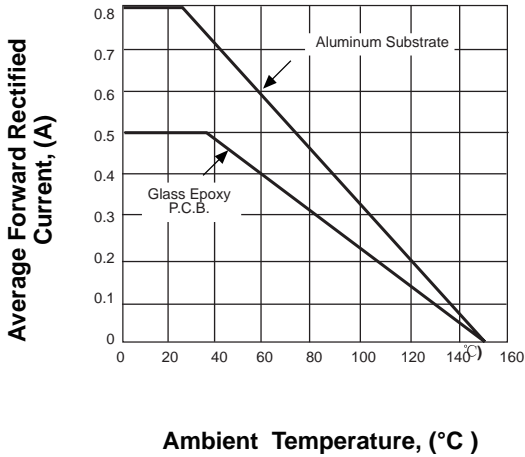


FIG.2 PEAK FORWARD SURGE CURRENT

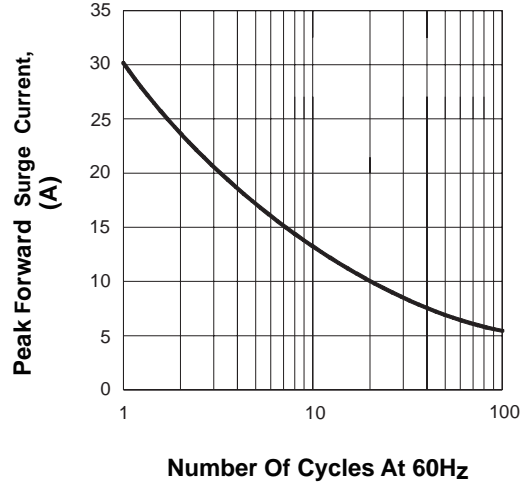


FIG.3 TYPICAL FORWARD CHARACTERISTICS

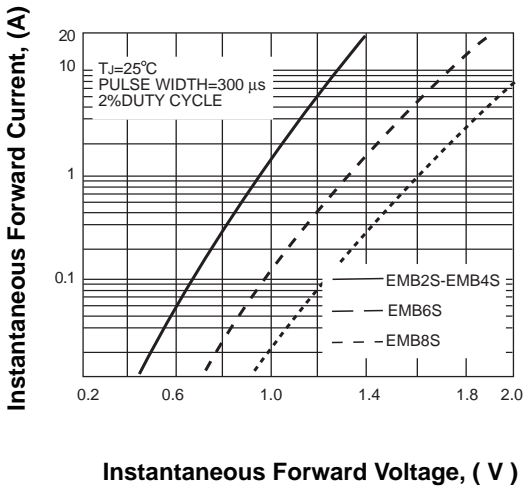


FIG.4 TYPICAL REVERSE CHARACTERISTICS

