



EMB1SU THRU EMB6SU

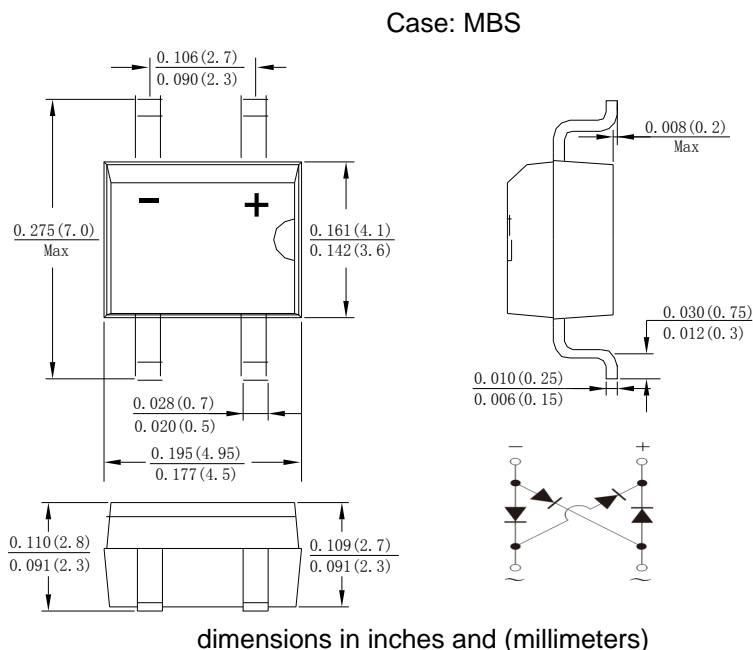
Single Phase 1.0AMP Super Fast Glass Passivated Bridge Rectifier

Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-35A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0

Mechanical Data

- Case:Reliable low cost construction utilizing molded plastic technique
- Terminals:Plated Leads Solderable per MIL-STD-202,Method208
- Polarity:As Marked on Case
- Mounting Position:Any
- Marking:Type Number



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	EMB1SU	EMB2SU	EMB4SU	EMB6SU	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	100	200	400	600	V
	V _{RWM}					
	V _{DC}					
RMS Reverse Voltage	V _{RMS}	70	140	280	420	V
Average Rectified Output Current (Note 1)@T _C =100°C	IF(AV)	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35				A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	5.084				A ² s
Forward Voltage per element @IF=1.0A	V _{FM}	0.95		1.3	1.7	V
Peak Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	5.0 100				uA
Maximum reverse recovery time (Note 2)	T _{RR}	35				ns
Typical Junction Capacitance (Note 3)	C _J	22				pF
Typical Thermal Resistance	R _{θJA}	60				°C/W
	R _{θJL}	16				
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150				°C

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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Fig. 1 Output Current Derating Curve

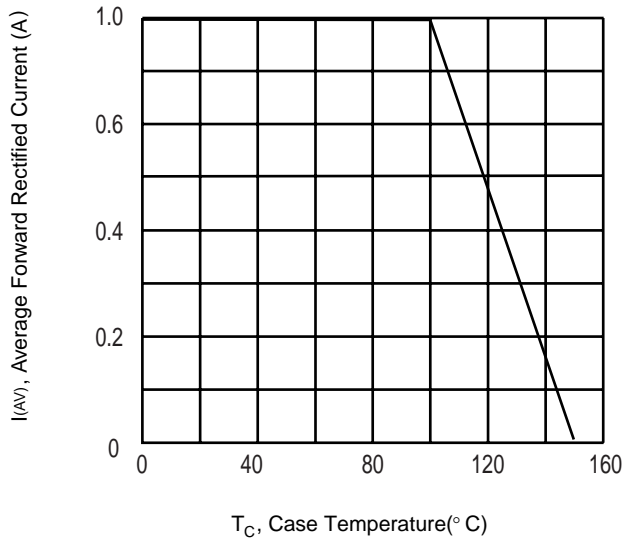


Fig. 2 Typical Forward Characteristics

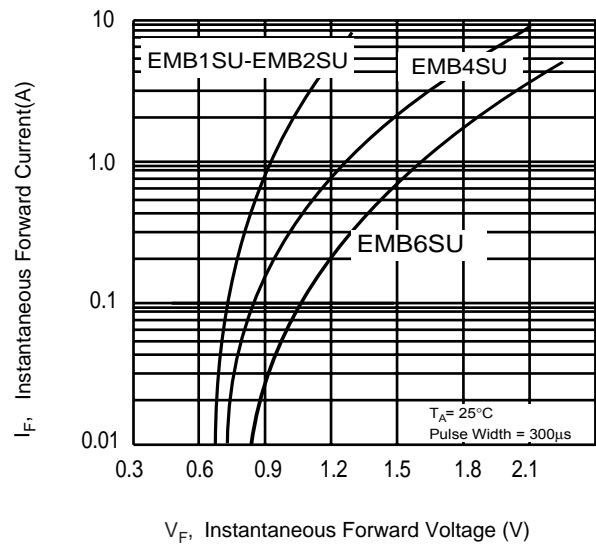


Fig.3 Maximum Peak Forward Surge Current

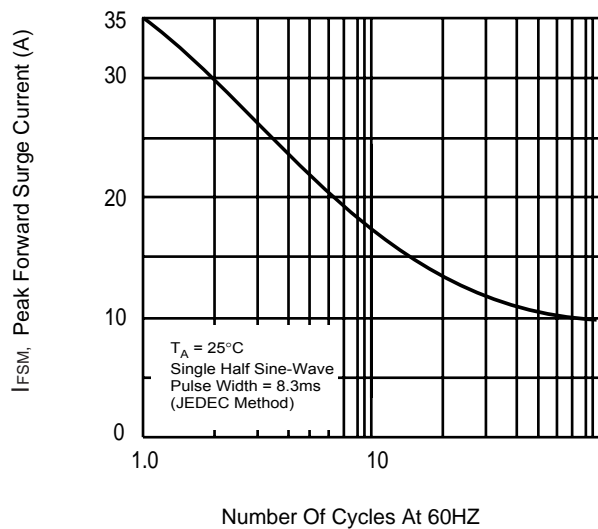


Fig. 4 Typical Junction Capacitance

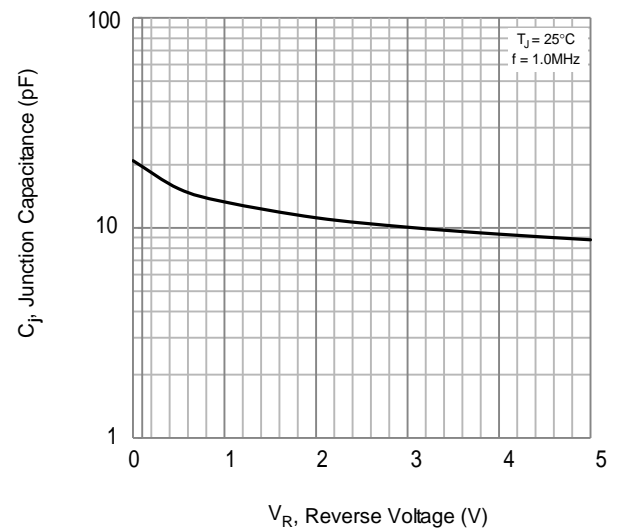


Fig. 5 Typical Reverse Characteristics

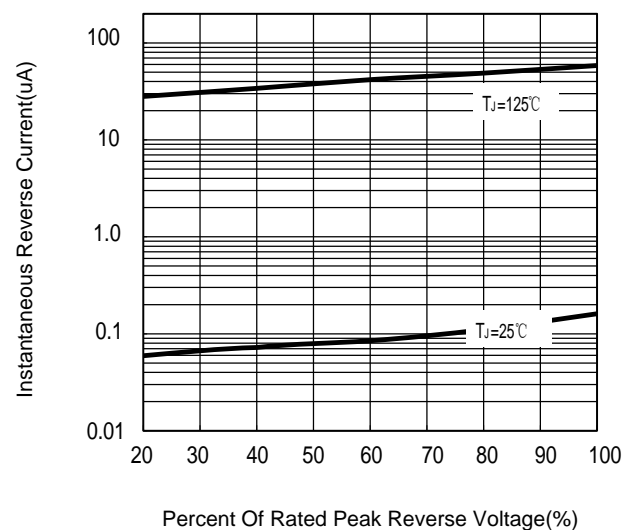
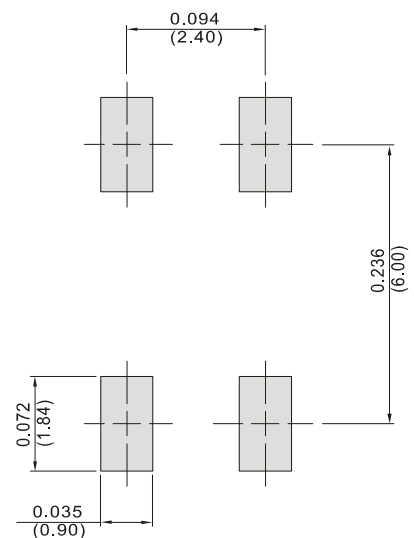


Fig. 6 Mounting Pad Layout





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