



UMB1S THRU UMB10S

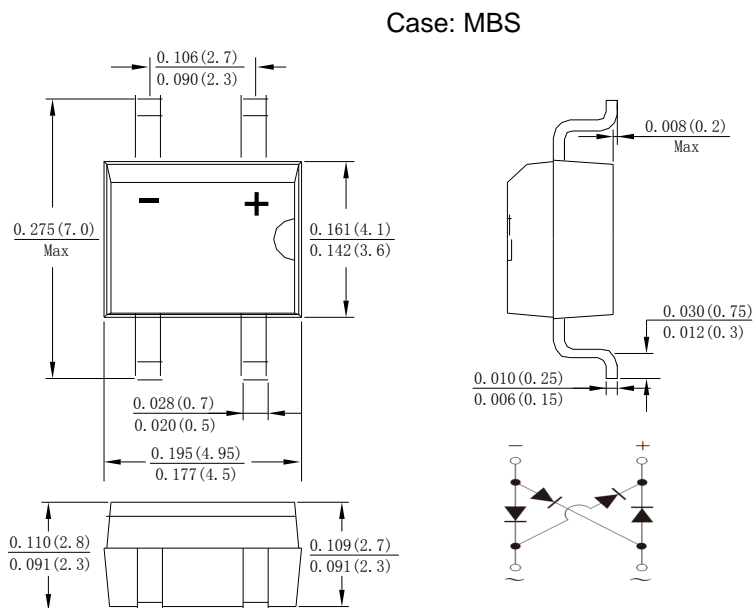
Single Phase 0.8AMP Ultra Fast Glass Passivated Bridge Rectifier

Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-30A 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



dimensions in inches and (millimeters)

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	UMB1S	UMB2S	UMB4S	UMB6S	UMB8S	UMB10S	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}							
DC Blocking Voltage	V _{DC}							
RMS Reverse Voltage	V _{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T _C =100℃ (Note 2)@T _C =100℃	I _{F(AV)}	0.5 0.8						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30						A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	3.735						A ² s
Forward Voltage per element @I _F =0.8A	V _{FM}	1.0		1.3	1.7			V
Peak Reverse Current @T _J =25℃ At Rated DC Blocking Voltage @T _J =125℃	I _R	5.0 100						uA
Maximum reverse recovery time (Note 3)	T _{RR}	50			75			ns
Typical Junction Capacitance (Note 4)	C _J	13						pF
Typical Thermal Resistance	R _{θJA}	60						℃/W
	R _{θJL}	16						
Operating and Storage Temperature Range	T _J ,T _{STG}	-55to+150						℃

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

2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.

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

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



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Fig. 1 Output Current Derating Curve

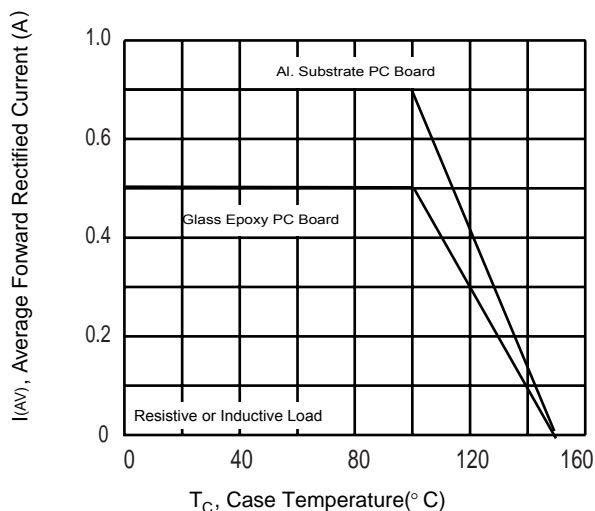


Fig. 2 Typical Forward Characteristics

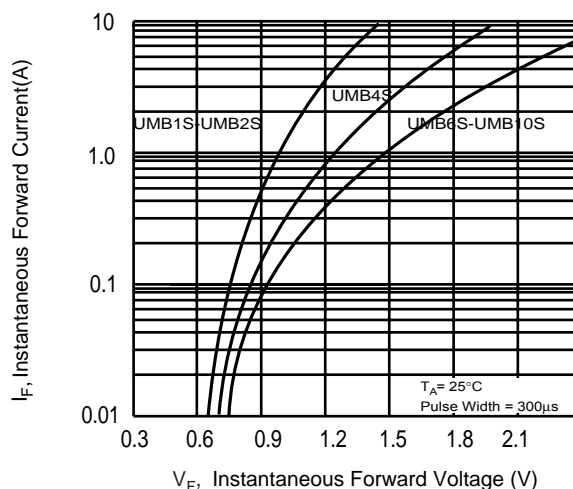


Fig.3 Maximum Peak Forward Surge Current

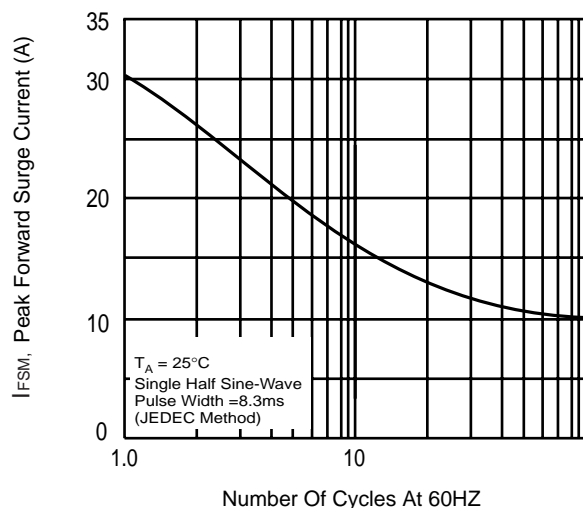


Fig. 4 Typical Junction Capacitance

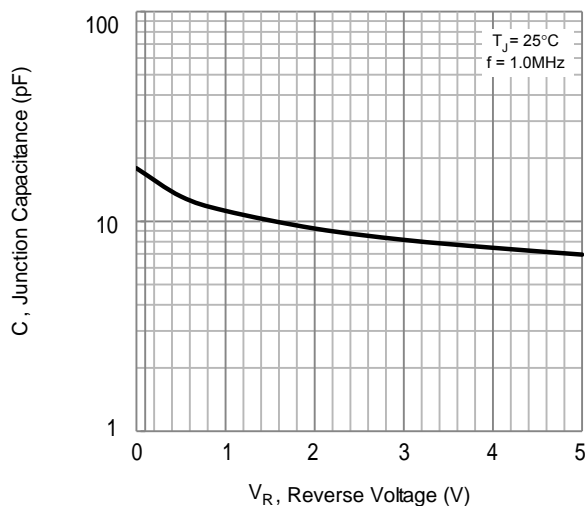


Fig.5 Typical Reverse Characteristics

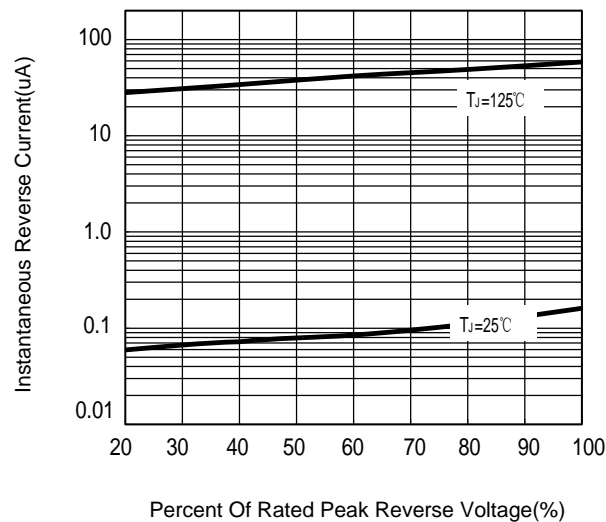
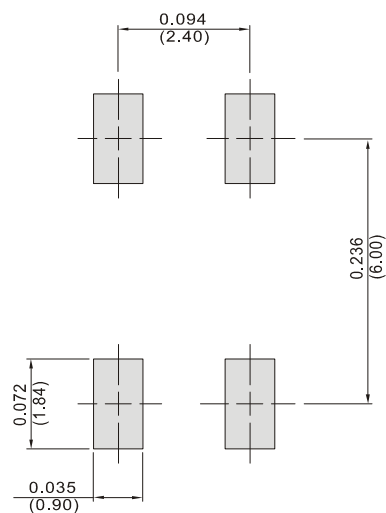


Fig.6 Mounting Pad Layout





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