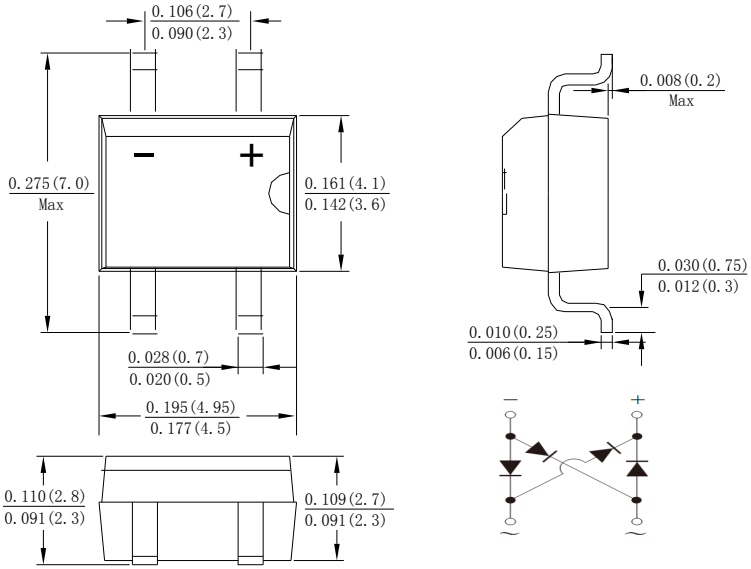
UMB1SU THRU UMB10SU

Single Phase 1.0AMP Ultra 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

Case: MBS



dimensions in inches and (millimeters)

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℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	UMB1SU	UMB2SU	UMB4SU	UMB6SU	UMB8SU	UMB10SU	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C=100℃	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^2t Rating for Fusing (t < 8.3ms)	I^2t	5.084						A^2s
Forward Voltage per element @IF=1.0A	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 2)	T_{RR}	50			75			ns
Typical Junction Capacitance (Note 3)	C_J	15						pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	60 16						℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150						℃

Note:1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

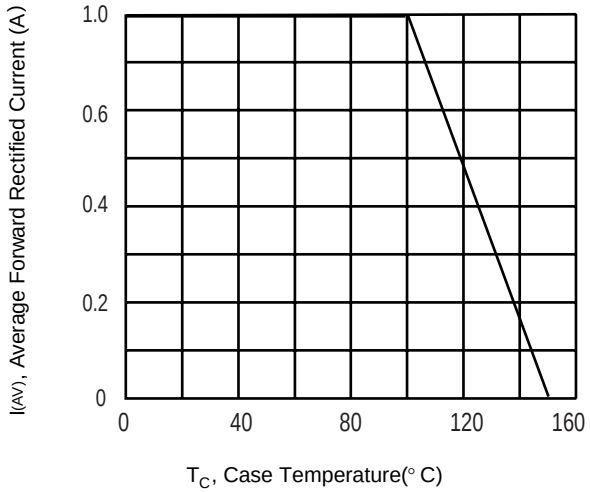


Fig. 2 Typical Forward Characteristics

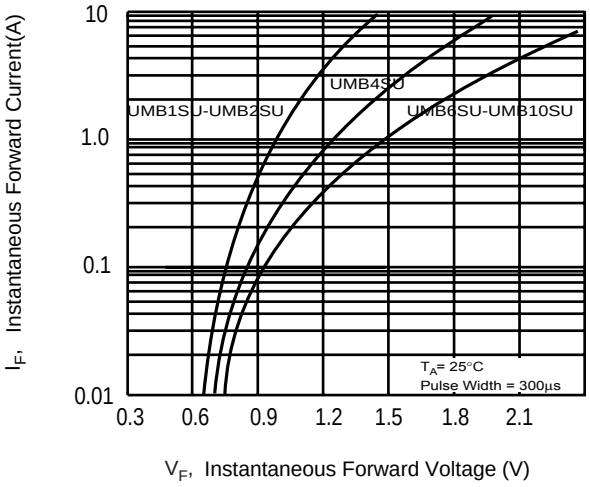


Fig.3 Maximum Peak Forward Surge Current

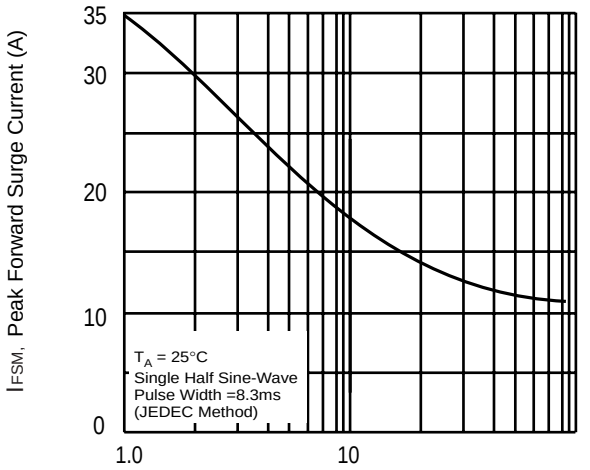


Fig. 4 Typical Junction Capacitance

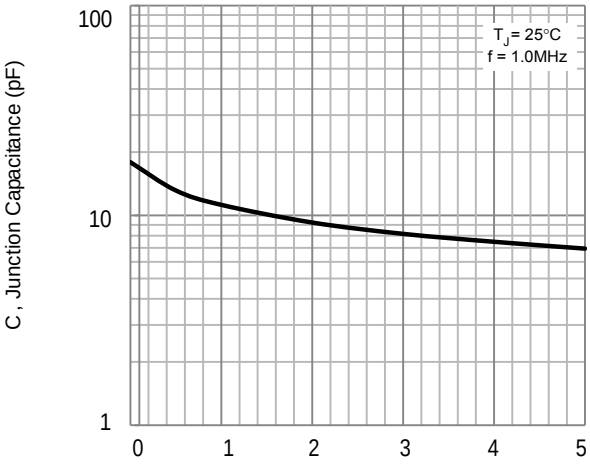


Fig.5 Typical Reverse Characteristics

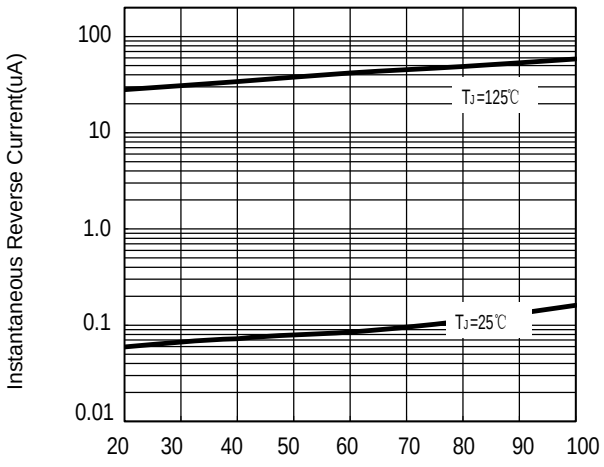
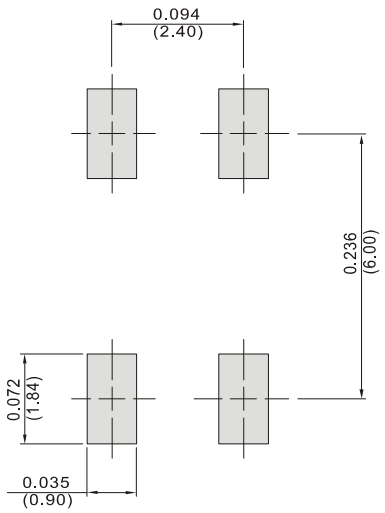


Fig.6 Mounting Pad Layout



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