UMB1M THRU UMB10M

SINGLE PHASE 0.8AMP ULTRA FAST GLASS PASSIVATED BRIDGE RECTIFIER

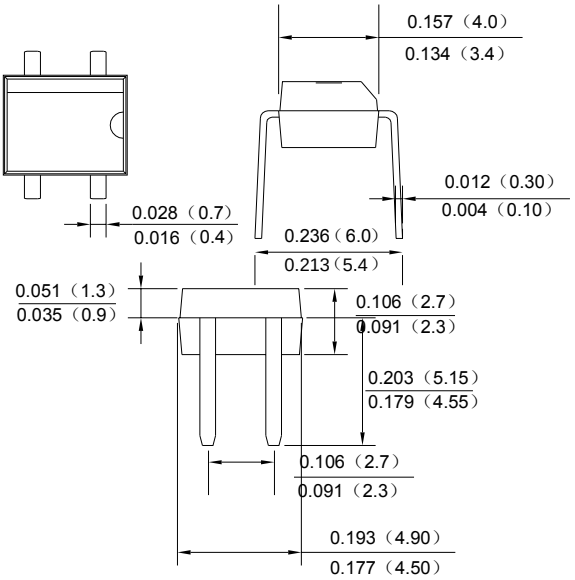
Features

- 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

MBM



Dimiensions in inches and（milimeters）

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	UMB1M	UMB2M	UMB4M	UMB6M	UMB8M	UMB10M	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_A=40℃ (Note 2)@T_A=40℃	I_O	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
Forward Voltage per element @IF=0.8A	V_{FM}	1.0		1.3	1.7			V
Peak Reverse Current @T_A=25℃ At Rated DC Blocking Voltage @T_A=125℃	I_R	5.0 500						uA
Maximum reverse recovery time（Note 3）	T_{RR}	50			75			ns
Typical Junction Capacitance per leg	C_J	13						pF
	$R_{\theta JA}$	70						℃/W
Typical Thermal Resistance per leg (Note 4)	$R_{\theta JL}$	20						
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. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
3. Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=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

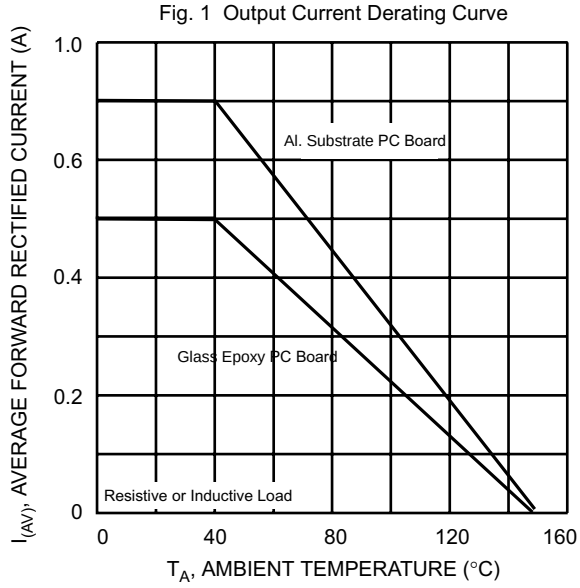

Fig. 2 Typical Forward Characteristics (per leg)

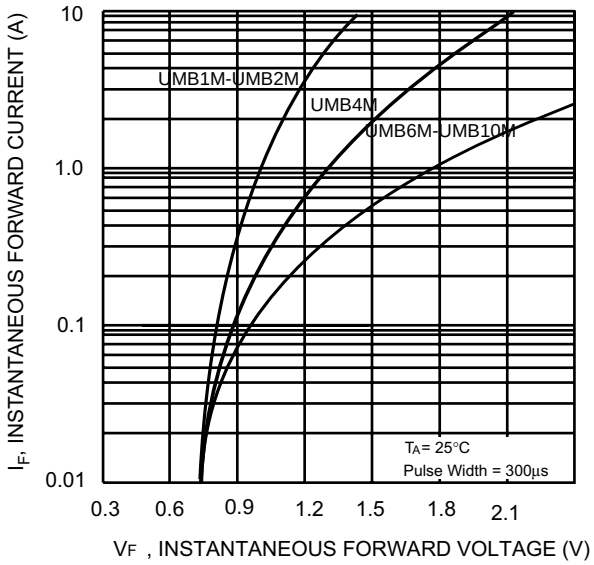

Fig. 3 Maximum Peak Forward Surge Current (per leg)

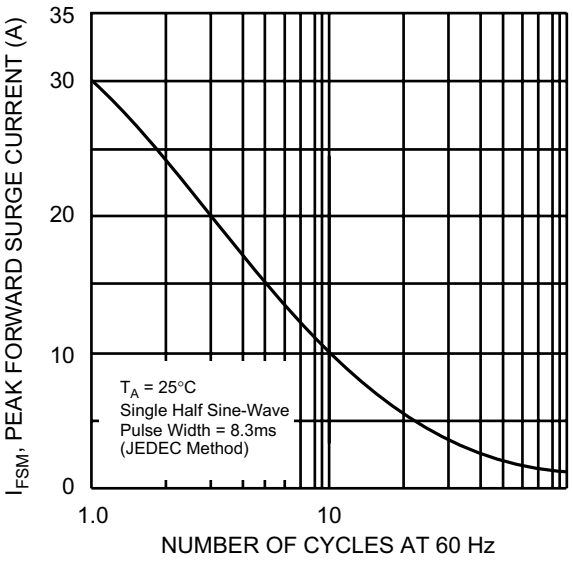

Fig. 4 Typical Junction Capacitance

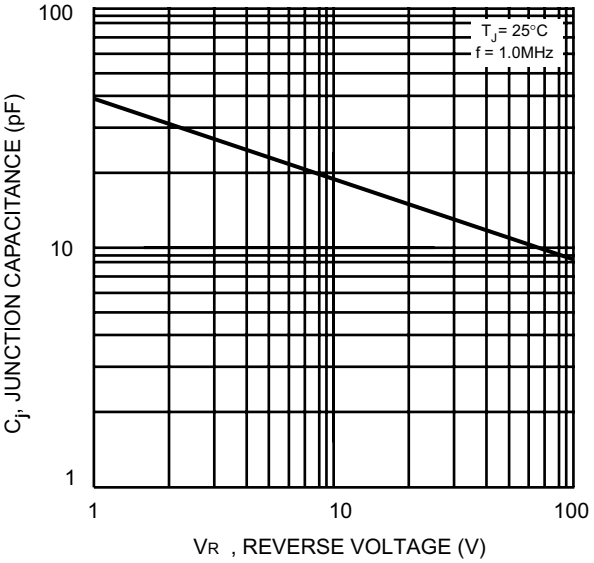

Fig. 5 T ypical Reverse Characteristics (per element)