



1A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

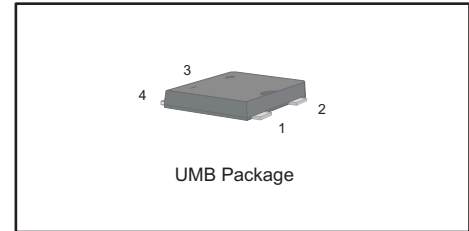
Glass Passivated Chip Junction
Reverse Voltage - 100 to 1000 V
Average Rectified Output Current - 1 A
High Surge Current Capability
Designed for Surface Mount Application

MECHANICAL DATA

- Case: UMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 45mg/0.0016oz

PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	UM1B-10	UM2B-10	UM4B-10	UM6B-10	UM8B-10	UM10B-10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current @ Fig.1	I_O	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35						A
Peak Forward Surge Current 1.0 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	70						A
I^2t Rating for fusing($3ms \leq t \leq 8.3ms$)	I^2t	5.1						A ² S
Maximum Forward Voltage at 1.0 A	V_F	1.1						V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_R	5 100						μA
Typical Junction Capacitance (Note1)	C_j	7						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	40 15 25						$^\circ C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board 4X1.5" X 1.5" (3.81 X 3.81 cm) copper pad.



Fig.1 Average Rectified Output Current Derating Curve

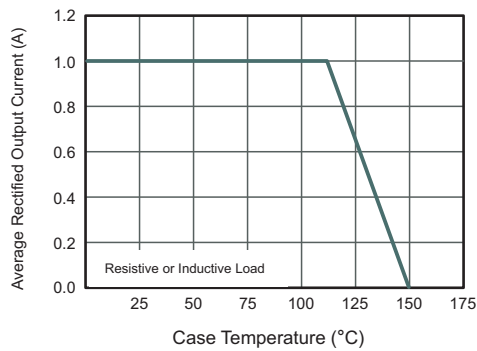


Fig.2 Typical Instantaneous Reverse Characteristics

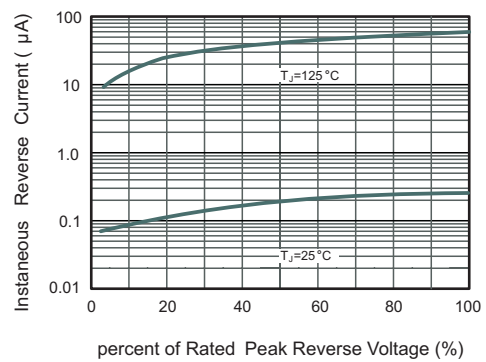


Fig.3 Typical Forward Characteristic

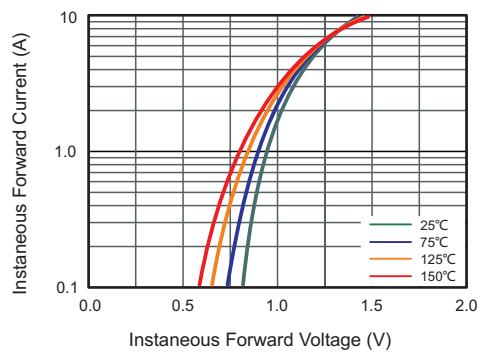


Fig.4 Typical Junction Capacitance

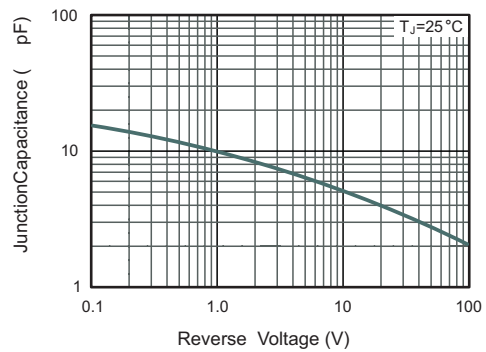
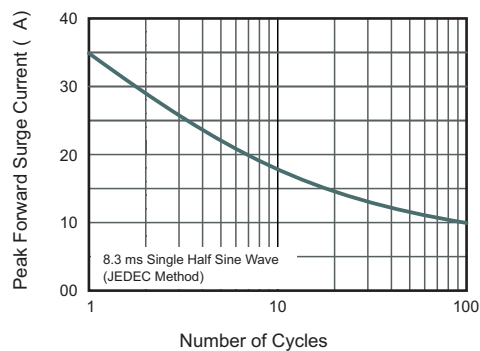


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

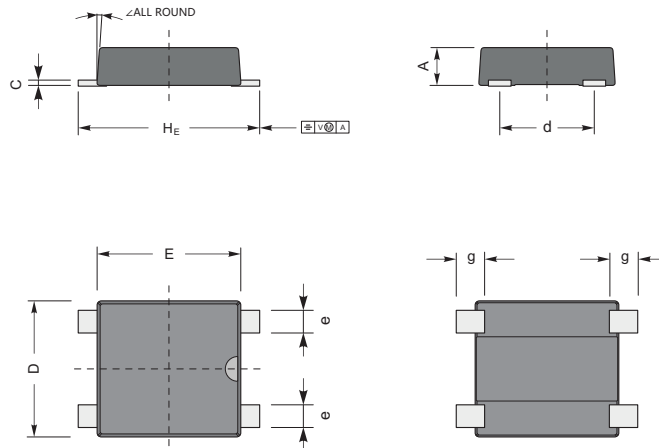




PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

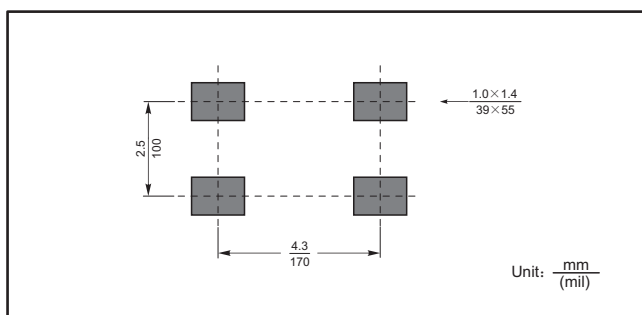
UMB



UMB mechanical data

UNIT		A	C	D	E	H _E	g	d	e	∠
mm	max	1.2	0.20	3.8	4.0	5.1	0.82	2.7	0.70	7°
	min	1.0	0.12	3.4	3.6	4.6	0.51	2.3	0.51	
mil	max	47	7.9	150	157	201	32	106	28	
	min	39	4.7	134	142	181	20	91	20	

The recommended mounting pad size



Marking

Type number	Marking code
UM1B-10	10U1
UM2B-10	10U2
UM4B-10	10U4
UM6B-10	10U6
UM8B-10	10U8
UM10B-10	10U10



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