

UM1B-AT THRU UM10B-AT

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

Forward Current-0.8A

Reverse Voltage-100V to 1000V

FEATURES

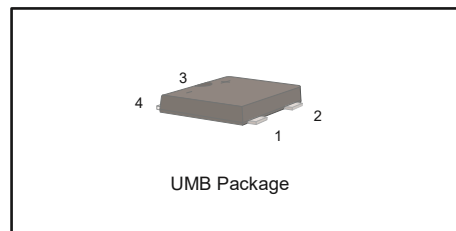
- ◆ For surface mount applications
- ◆ Glass passivated chip junction
- ◆ High surge current capability

MECHANICAL DATA

- ◆ Case: UMB molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750 , Method 2026
- ◆ Weight: Approximated 0.045 grams

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 derating by 20 %.

PARAMETER	SYMBOL	UM1B-AT	UM2B-AT	UM4B-AT	UM6B-AT	UM8B-AT	UM10B-AT	UNIT
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
Maximum Average Forward Rectified Current at $T_C=115^{\circ}C$	$I_{F(AV)}$	0.8						A
Peak Forward Surge Current (Note1)	I_{FSM}	25						A
Maximum Forward Voltage at 0.8A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	3 30						μA
Typical Junction Capacitance (Note2)	C_J	13						pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	110						$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^{\circ}C$

Notes:1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

2. Measured at 1MHz and applied reverse voltage of 4 V D.V.

3. Mounted on 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.

Dated: 05/2016

Rev:1.0

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Average Rectified Output Current Derating Curve

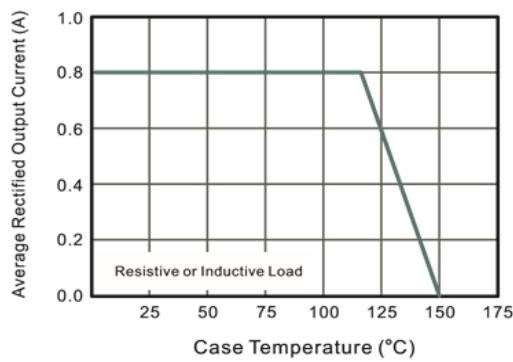


Fig.2 Typical Reverse Characteristics

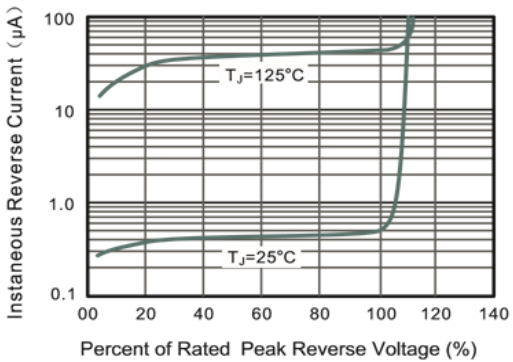


Fig.3 Typical Instantaneous Forward Characteristics

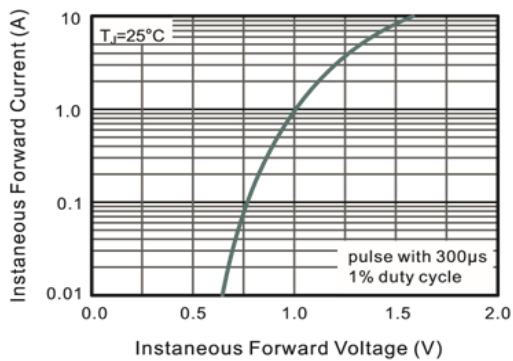


Fig.4 Typical Junction Capacitance

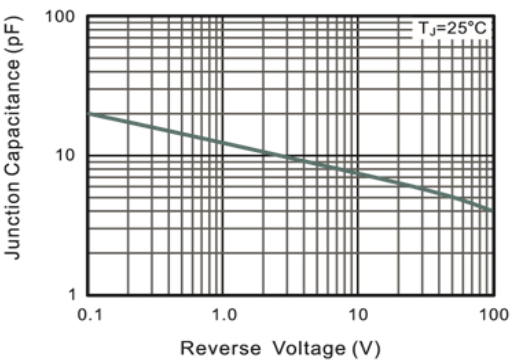
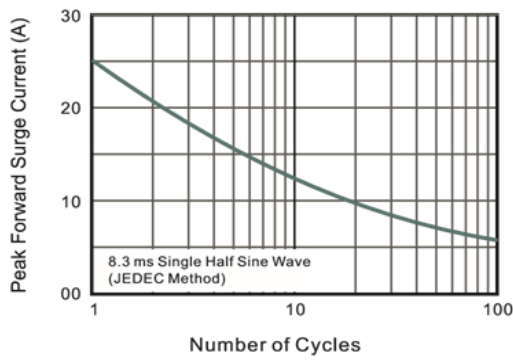


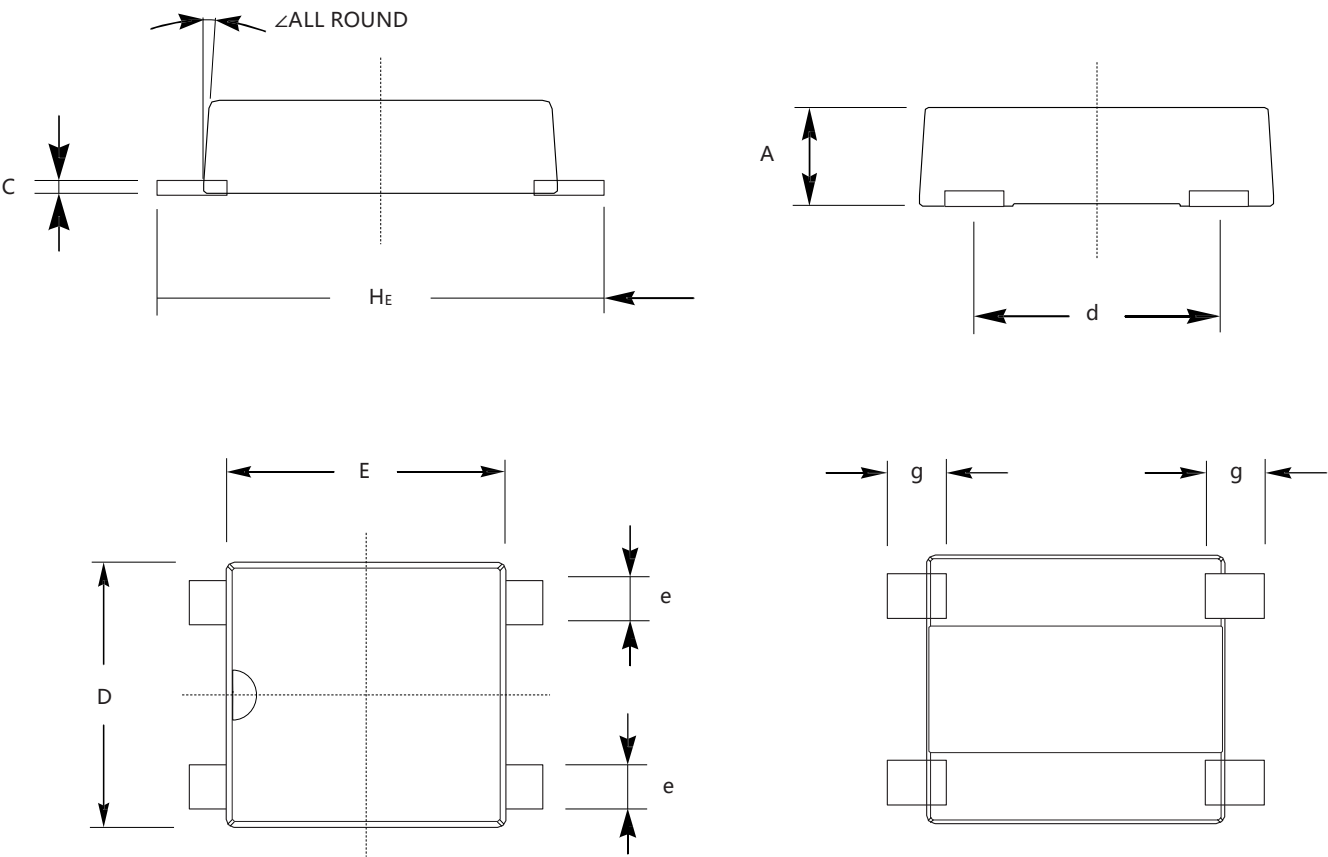
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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PACKAGE OUTLINE

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	0.7	7°
	min	1.0	0.12	3.4	3.6	4.6	0.51	2.3	0.5	
mil	max	47	7.9	150	157	201	32	106	28	
	min	39	4.7	134	142	181	20	91	20	

ORDERING INFORMATION

Device	Package	Shipping
UM1B-AT thru UM10B-AT	UMB	3,000/Tape & Reel (11 inches)
		5,000/ Tape & Reel (13 inches)