

0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

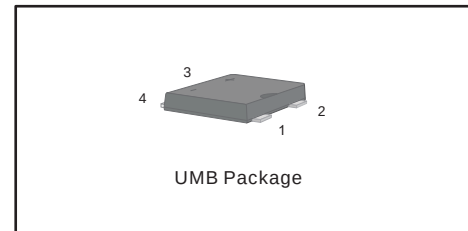
- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Average Rectified Output Current- 0.8A
- High Surge Current Capability
- Designed for Surface Mount Application

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 ambient temperature unless otherwise specified. °C

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

Parameter	Symbols	UM1B	UM2B	UM4B	UM6B	UM8B	UM10B	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 at $T_c = 115^\circ\text{C}$	I_O	0.8						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25						A
Forward Voltage per element @ $I_F = 0.4\text{A}$ @ $I_F = 0.8\text{A}$	V_F	1.0 1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_a = 25^\circ\text{C}$ @ $T_a = 125^\circ\text{C}$	I_R	3 30						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	110						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	$-55 \sim +150$						$^\circ\text{C}$

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

2. P.C.B. mounted with 4×1.5"×1.5" (3.81×3.81 cm) copper pad areas.



UM1B ~ UM10B

Ratings and Characteristics Curves

Fig.1 Average Rectified Output Current Derating Curve

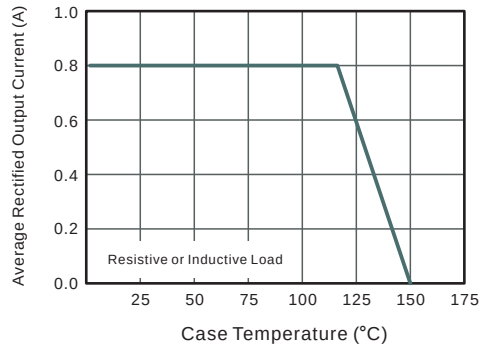


Fig.2 Typical Reverse Characteristics

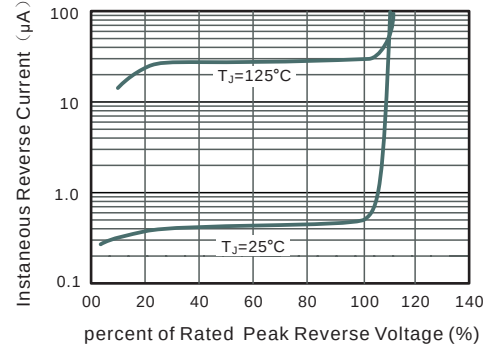


Fig.3 Typical Instantaneous Forward Characteristics

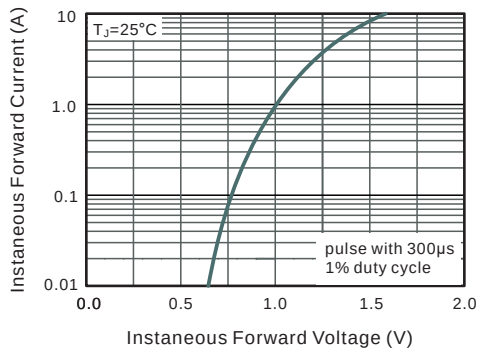


Fig.4 Typical Junction Capacitance

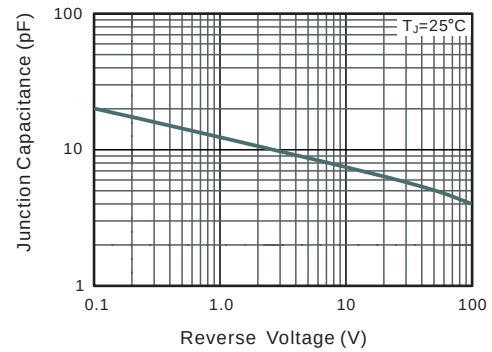
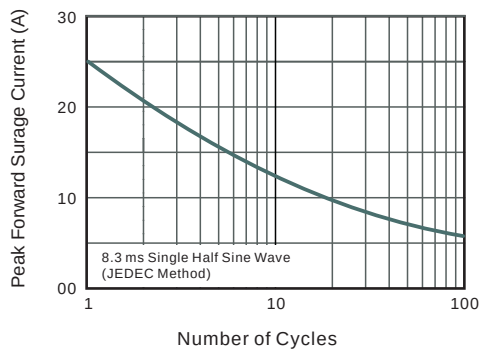
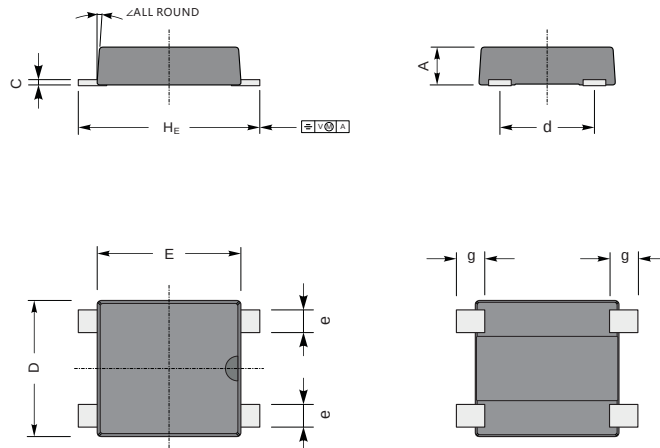


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

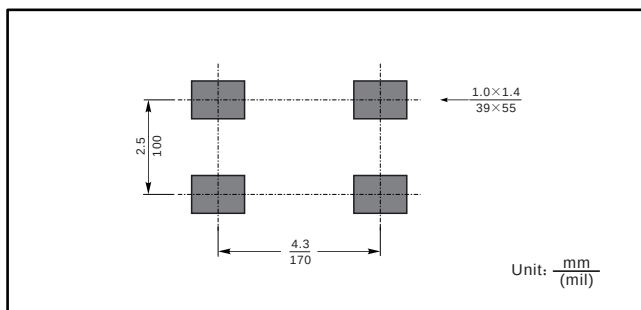
Plastic surface mounted package; 4 leads



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	UM1B
UM2B	UM2B
UM4B	UM4B
UM6B	UM6B
UM8B	UM8B
UM10B	UM10B