LUM1B THRU LUM10B

1A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

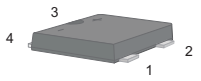
Glass Passivated Chip Junction
Reverse Voltage - 100 to 1000 V
Average Rectified Output Current- 1 A
High Surge Current Capability
Designed for Surface Mount Application

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 (-)



UMB Package

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	LUM1B	LUM2B	LUM4B	LUM6B	LUM8B	LUM10B	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 °C	I_O	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35						A
Maximum Forward Voltage at 1.0 A	V_F	1.1						V
Maximum DC Reverse Current @T_a=25 °C at Rated DC Blocking Voltage @T_a=125 °C	I_R	5 40						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	85 25						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°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.

Fig.1 Average Rectified Output Current Derating Curve

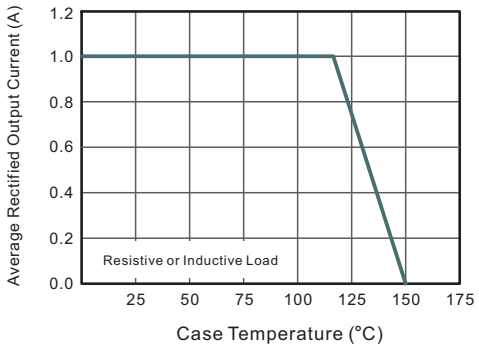


Fig.2 Typical Reverse Characteristics

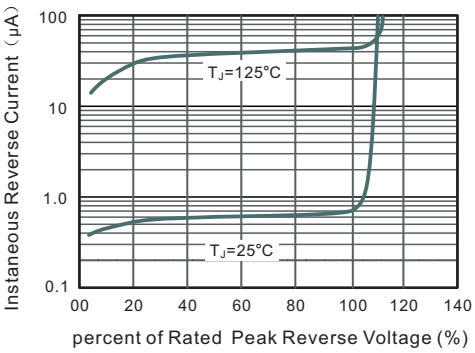


Fig.3 Typical Instaneous Forward Characteristics

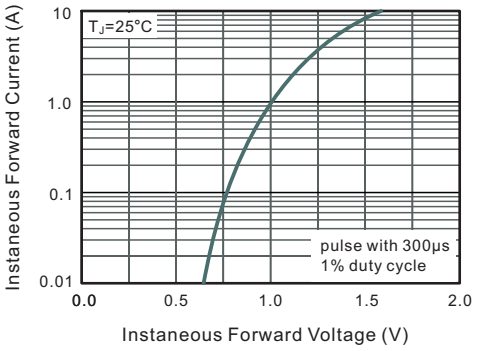


Fig.4 Typical Junction Capacitance

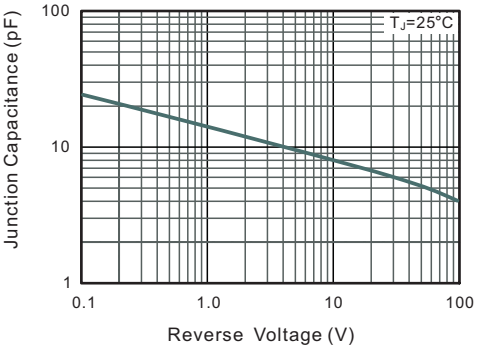
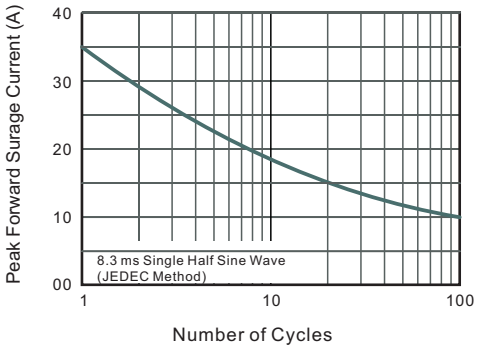
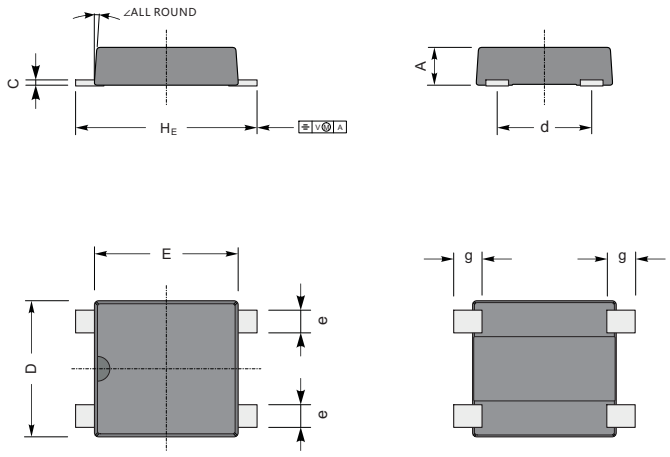


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE

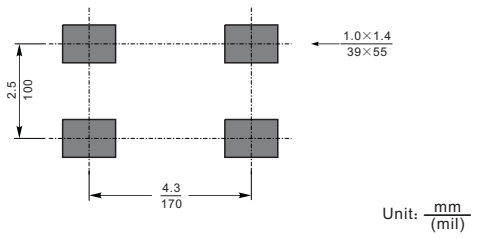
Plastic surface mounted package; 4 leads UMB



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
LUM1B	10U1
LUM2B	10U2
LUM4B	10U4
LUM6B	10U6
LUM8B	10U8
LUM10B	10U10