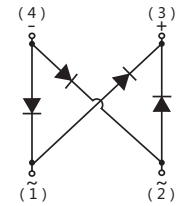
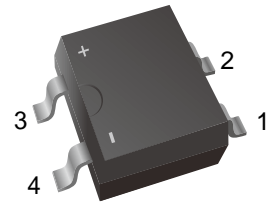


1A Surface Mount Glass Passivated Bridge Rectifier

Features

- Glass Passivated Chip Junction
- Reverse Voltage 100 to 1000 V
- Forward Current 1A
- High Surge Current Capability
- Designed for Surface Mount Application
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case : MBS
- Terminals: Solderable per MIL-STD-750, Method 2026

Ordering Information

Part Number	Shipping	Reel
LTM1B THRU LTM10B-TR3	3000PCS Tape&Reel	13 inches

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	Symbol	LTM1B	LTM2B	LTM4B	LTM6B	LTM8B	LTM10B	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
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
Maximum Forward Voltage at 1.0 A	V_F	1.1						V
Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$	I_R	5 100						μA
Typical Junction Capacitance (Note1)	C_j	7						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	45 15 25						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^\circ\text{C}$

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 cm X 3.81 cm) copper pad.

characteristics Curves

Fig.1 Average Rectified Output Current Derating Curve

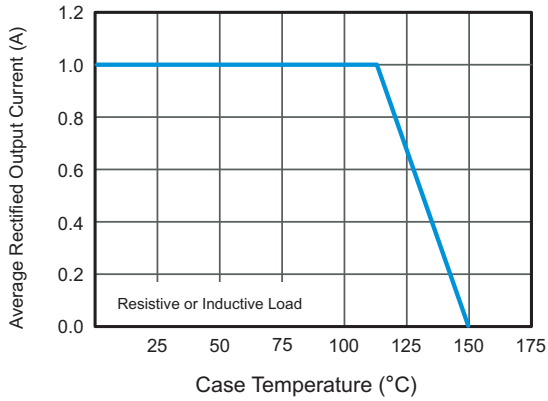


Fig.2 Typical Instantaneous Reverse Characteristics

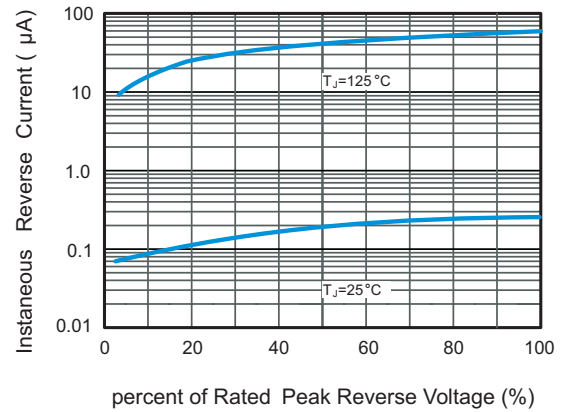


Fig.3 Typical Forward Characteristic

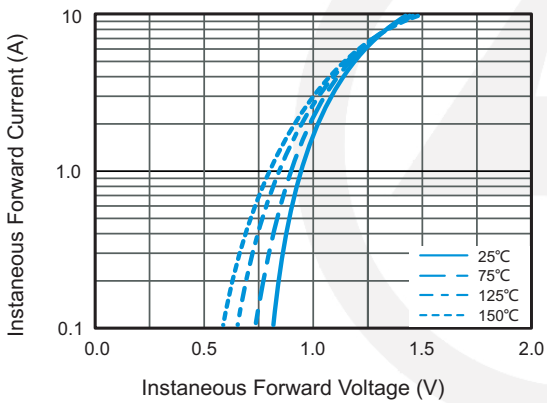


Fig.4 Typical Junction Capacitance

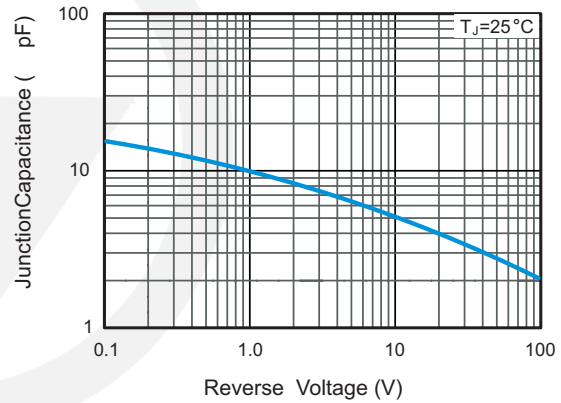
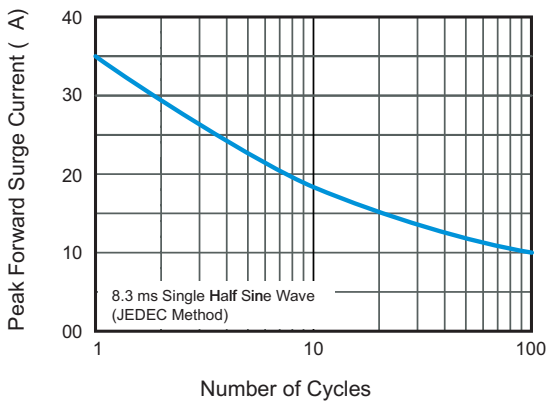
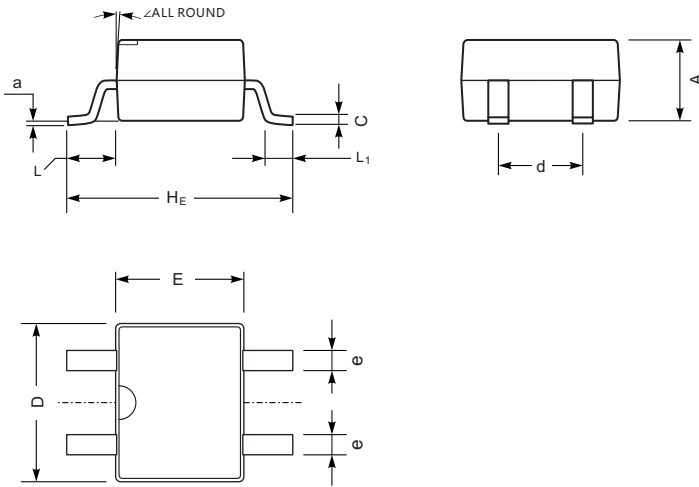


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



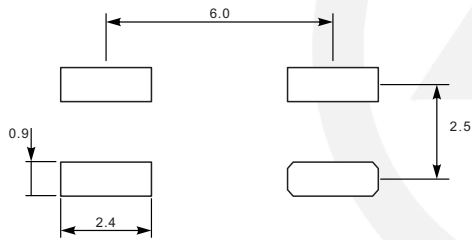
MBS Package Outline



Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	2.20	2.60
C	0.15	0.22
D	4.50	5.00
E	3.60	4.10
HE	6.40	7.00
d	2.30	2.70
e	0.50	0.70
L	1.30	1.70
L1	0.50	1.10
a	-	0.20
θ	7°	

MBS Suggested Pad Layout



Note:

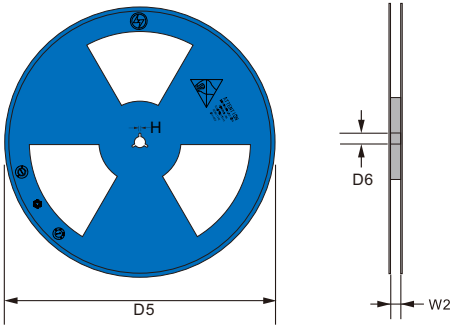
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purpose only.

Marking

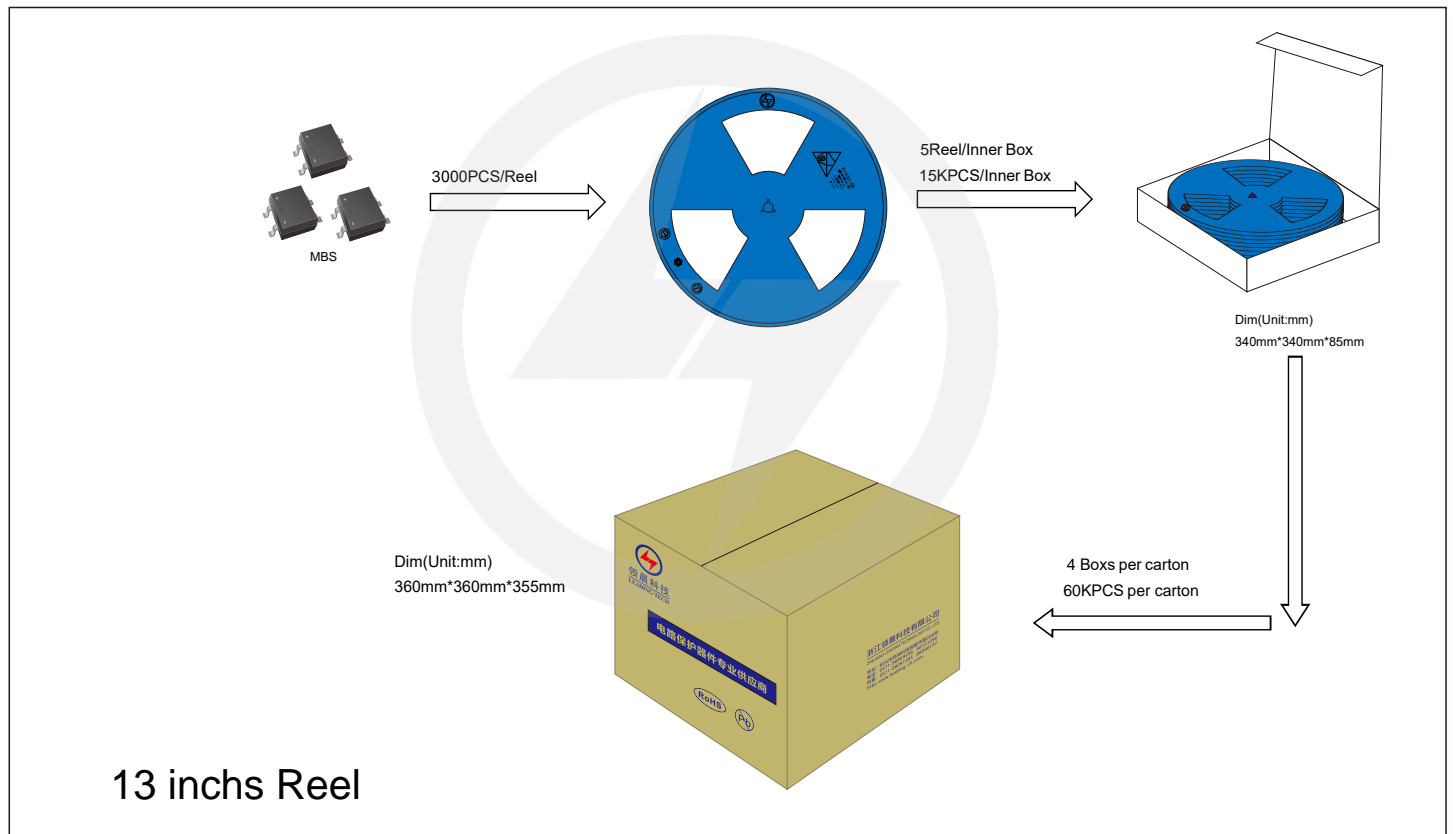
Type number	Marking code
LTM1B	MB1S
LTM2B	MB2S
LTM4B	MB4S
LTM6B	MB6S
LTM8B	MB8S
LTM10B	MB10S

Reel Dimensions

Unit : mm

<p>13" Reel</p> 	D5	$\Phi 330.0 \pm 2.0$
	D6	$\Phi 13.5 \pm 0.5$
	H	2.5 ± 1.0
	W2	12 ± 2.0
	Quantity: 3000PCS	

Packaging





Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T _L to T _P)	3°C/second max.
Preheat	
-Temperature Min (T _{S min})	150°C
-Temperature Max (T _{S max})	200°C
-Time (min to max) (t _s)	60-180 seconds
T _{S max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	60-150 seconds
Peak Temperature (T _P)	260°C
Time within 5°C of actual Peak Temperature (t _p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.12.19	2024.12.19	3.0	New File	/	Ding	