



RHB14S THRU RHB120S

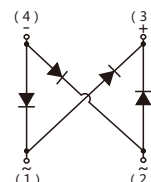
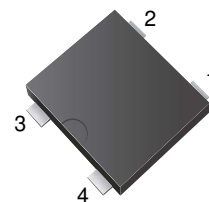
Surface Mount Bridge Rectifier

Features

- Reverse Voltage 40 to 200 V
- Forward Current 1 A
- High Surge Current Capability
- Designed for Surface Mount Application
- Lead free in comply with EU RoHS 2011/65/EU directives

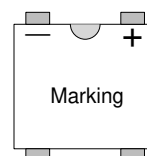
Mechanical Data

- Case:LTB
- Terminal:Leads solderable per MIL-STD-750 Method 2026



Ordering Information

Part Number	Shipping	Reel
RHB14S THRU RHB120S	5000PCS Tape&Reel	13 inches



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	Symbol	RHB14S	RHB16S	RHB110S	RHB120S	Unit
	Marking	M14BS	M16BS	M110BS	M120BS	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	60	100	200	V
Maximum RMS voltage	V _{RMS}	28	42	70	140	V
Maximum DC Blocking Voltage	V _{DC}	40	60	100	200	V
Maximum Average Forward Rectified Current at T _c = 100°C	I _{F(AV)}	1				A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30				A
Max Instantaneous Forward Voltage at 1 A	V _F	0.05	0.65	0.80	0.85	V
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a =100°C	I _R	0.05 5				mA
Typical Junction Capacitance (Note1)	C _J	110	80			pF
Typical Thermal Resistance (Note2)	R _{θJA}	87				°C/W
Operating Junction Temperature Range	T _J	-55 ~ +125				°C
Storage Temperature Range	T _{stg}	-55 ~ +125				°C

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

(2) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81cm×3.81cm) copper pad.



Characteristics Curve

FIG.1 FORWARD CURRENT DERATING CURVE

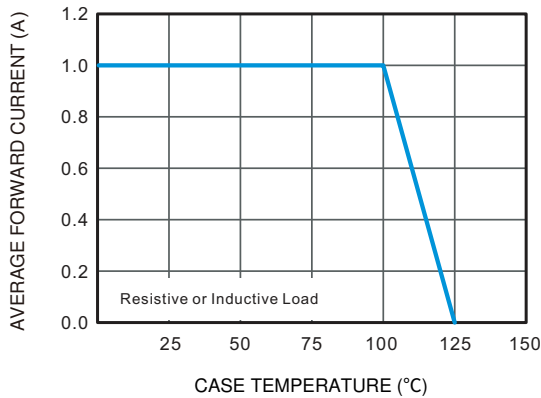


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

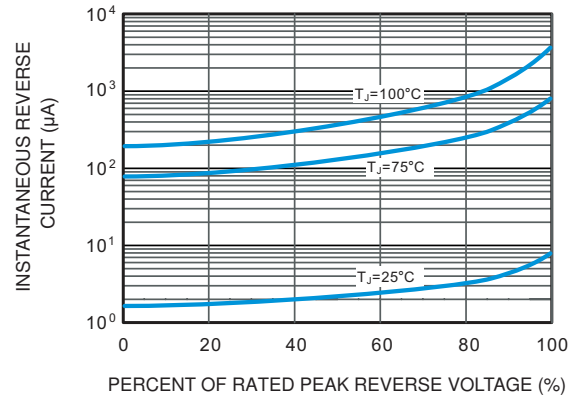


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

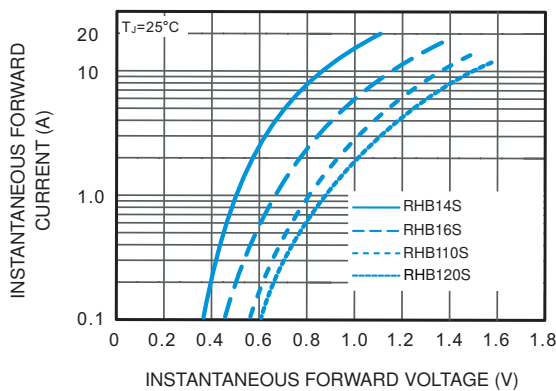


FIG. 4 TYPICAL JUNCTION CAPACITANCE

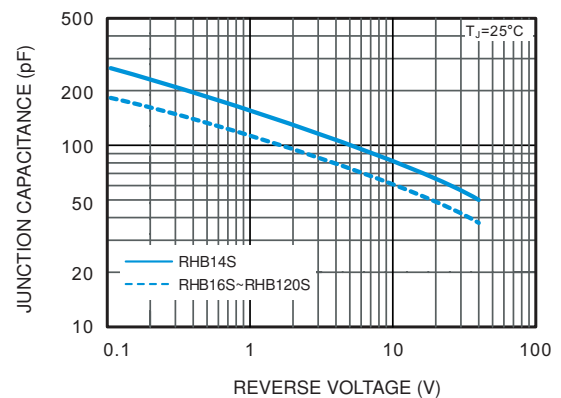


FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

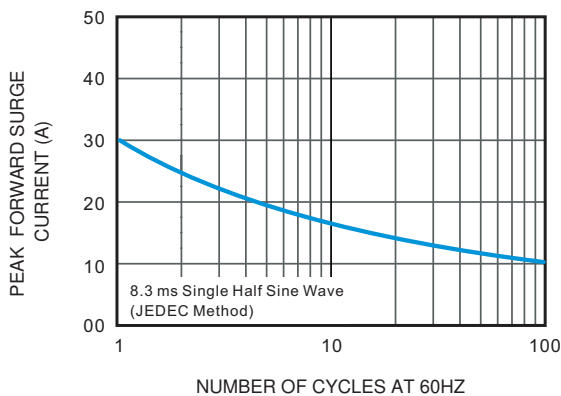
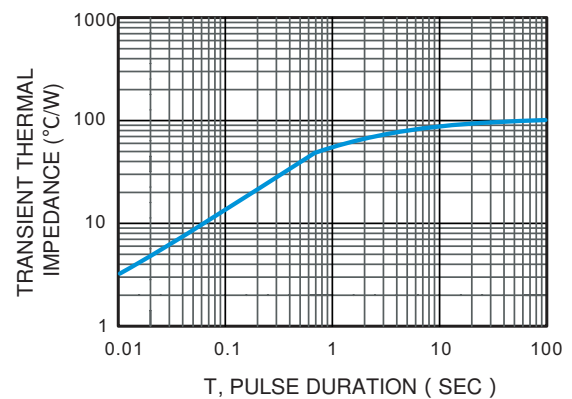
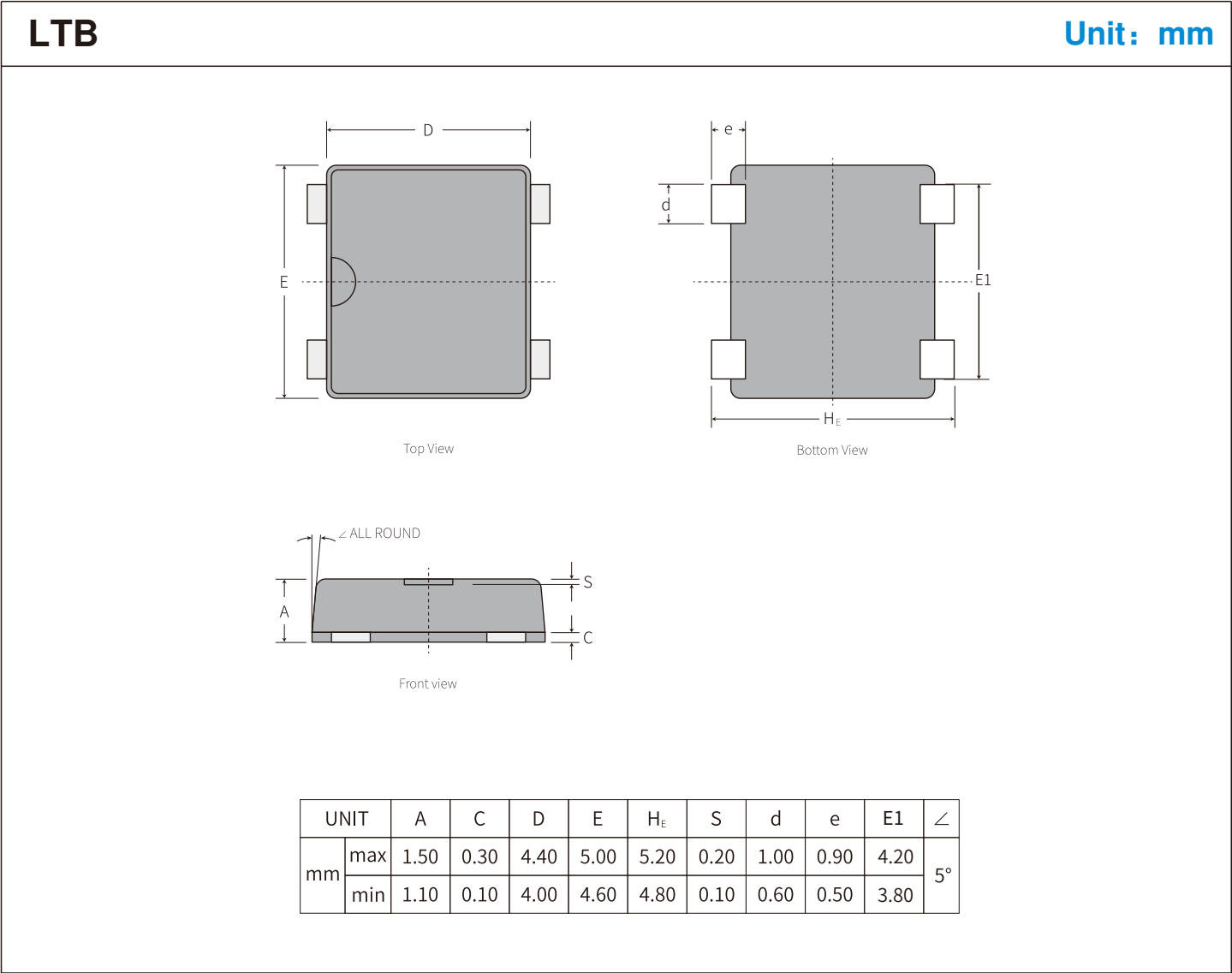


FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE

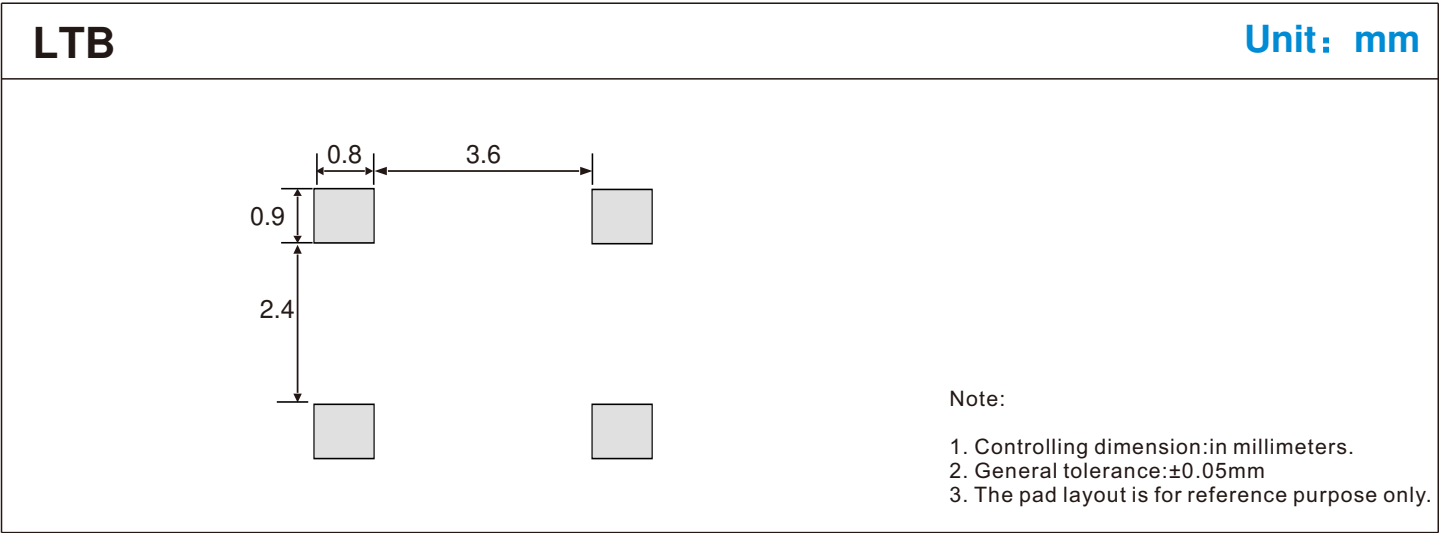




Package Outline



Suggested Pad Layout



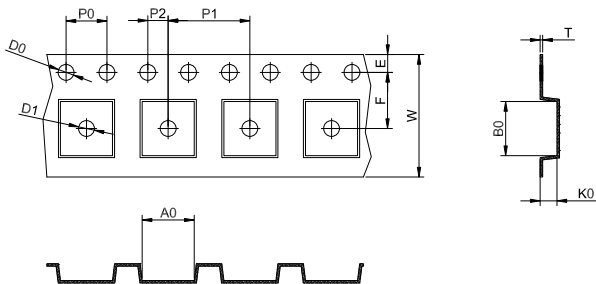


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Surface Mount Bridge Rectifier

Carrier Tape Dimensions

Unit: mm

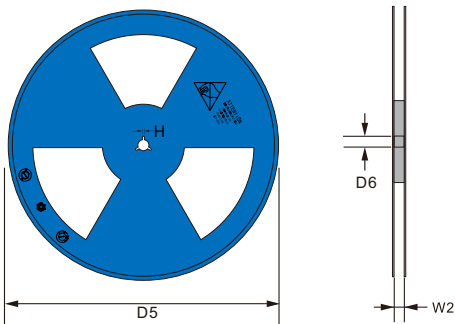


Symbol	Spec	Symbol	Spec
W	12.00±0.10	P1	8.00±0.10
E	1.75±0.10	P2	2.00±0.05
F	5.50±0.05	T	0.25±0.02
D0	1.55±0.05	A0	5.10±0.10
D1	1.55±0.10	B0	5.30±0.10
P0	4.00±0.10	K0	1.65±0.05

Reel Dimensions

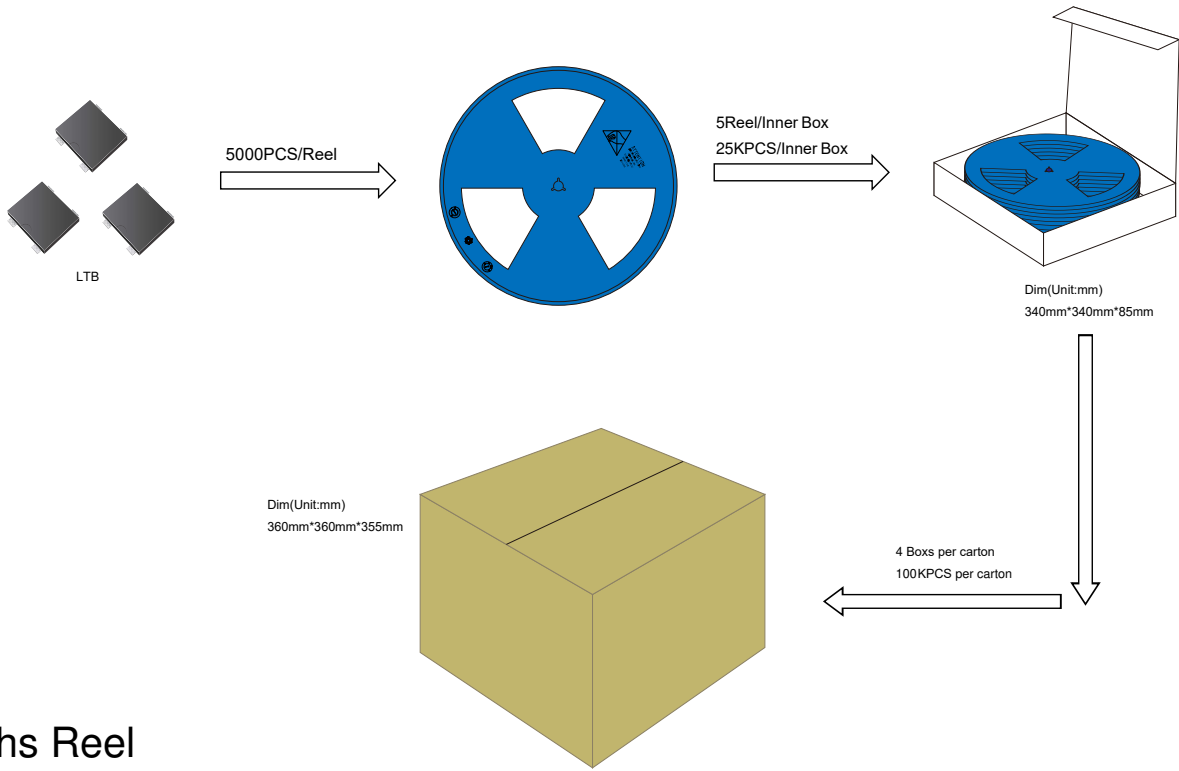
Unit: mm

13" Reel



D5	Φ330.0±2.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	12±2.0
Quantity: 5000PCS	

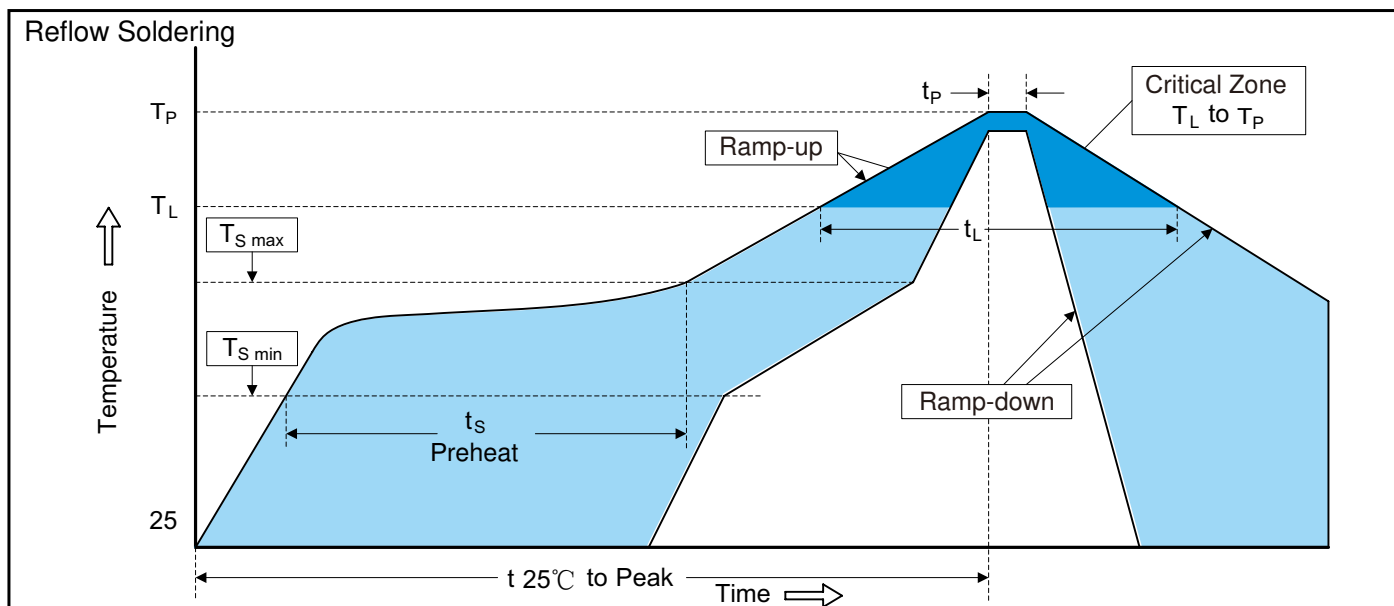
Packaging



13 inchs Reel



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.