

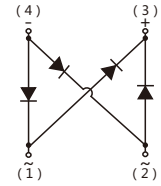
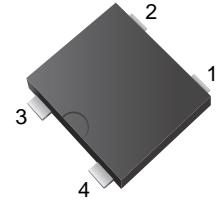
Surface Mount Bridge Rectifier

Features

- Reverse Voltage 600 to 1600V
- Forward Current 1 A
- High Surge Current Capability
- Designed for Surface Mount Application
- Lead free in comply with EU RoHS 2011/65/EU directives

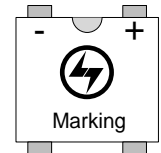
Mechanical Data

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



Ordering Information

Part Number	Shipping	Reel
LTB06 THRU LTB16	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	LTB06	LTB08	LTB10	LTB16	Unit
	Marking	LTB06	LTB08	LTB10	LTB16	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	1600	V
Maximum RMS voltage	V_{RMS}	420	560	700	1120	V
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	1600	V
Average Rectified Output Current at $T_c = 125^\circ\text{C}$	I_o	1				A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	40			25	A
Maximum Forward Voltage at 1A	V_F	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	1			150	μA
Typical Junction Capacitance (Note1)	C_J	20				pF
Operating and Storage Temperature Range	T_J, T_{stg}	-55 ~ +150				$^\circ\text{C}$

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



Characteristic Curves

FIG.1 AVERAGE RECTIFIED OUTPUT CURRENT DERATING CURVE

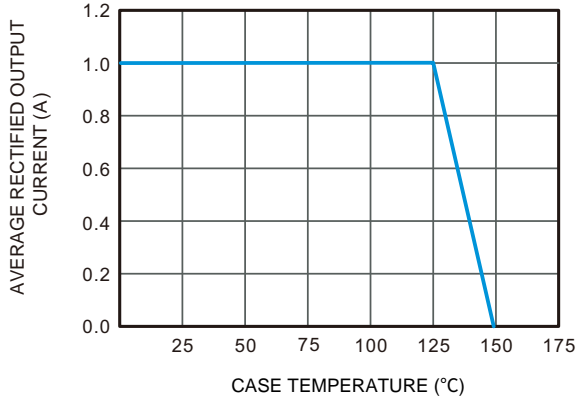


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

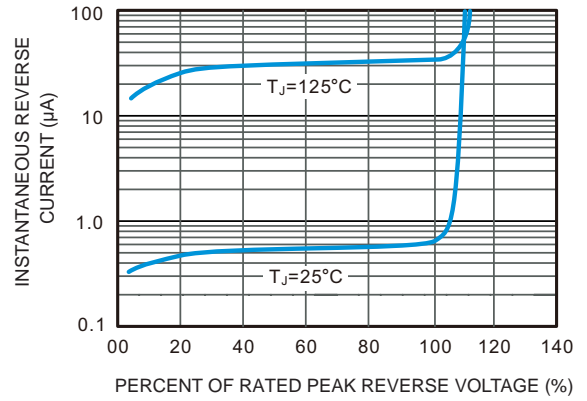


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

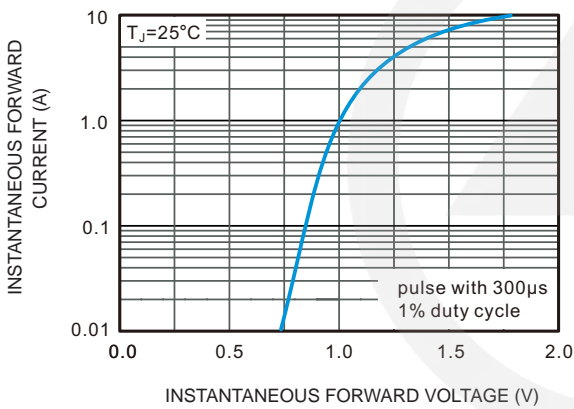


FIG. 4 TYPICAL JUNCTION CAPACITANCE

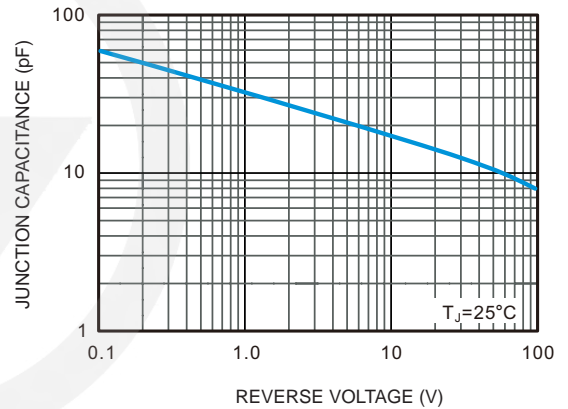
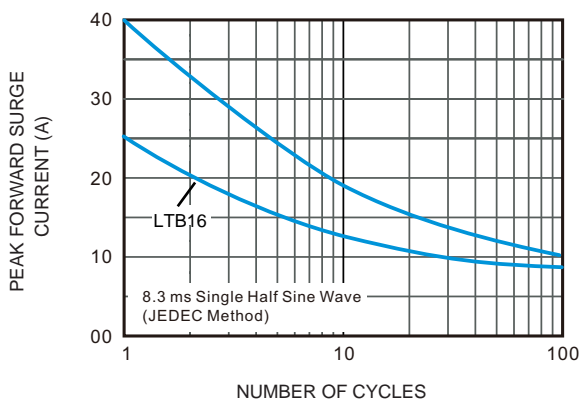
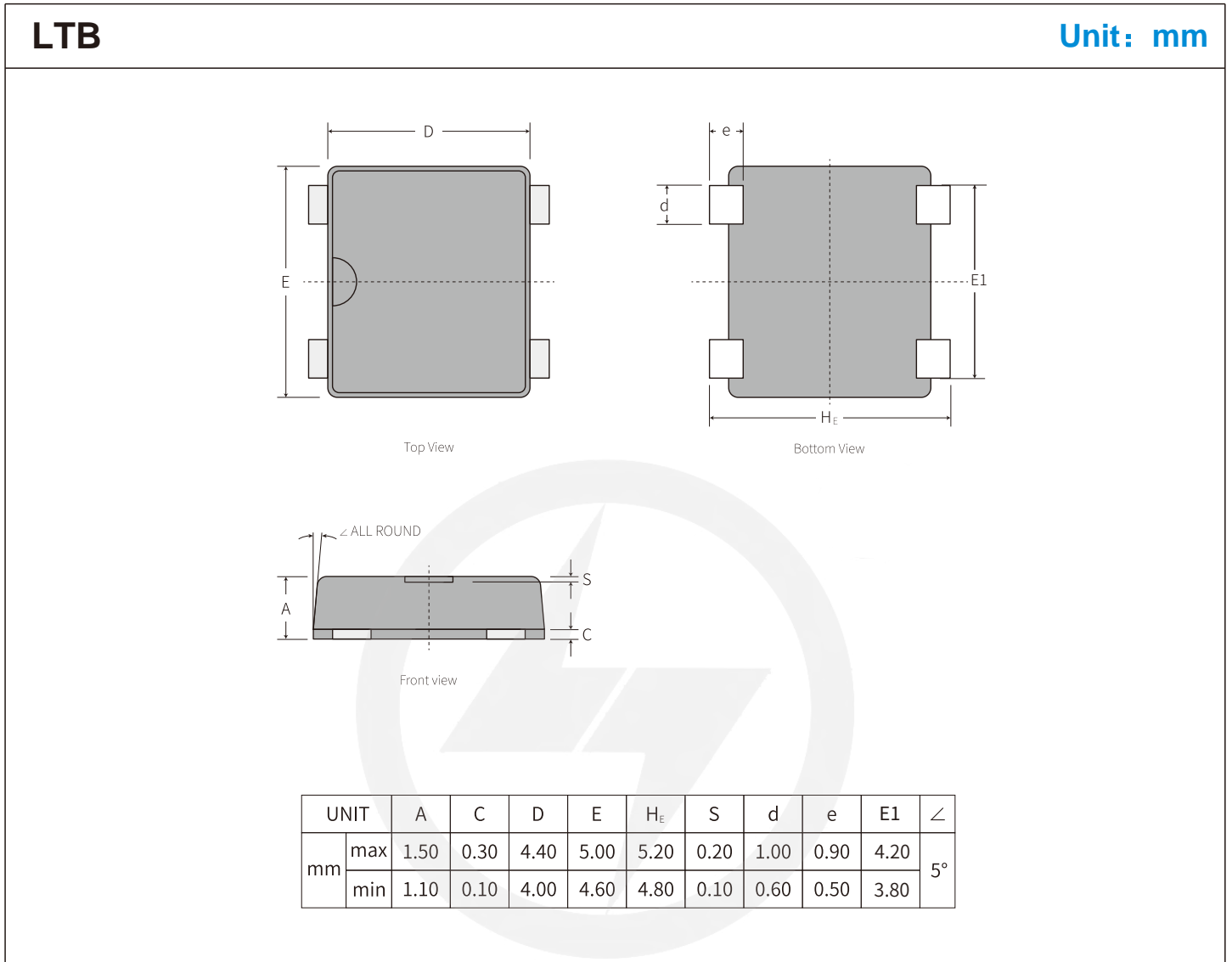


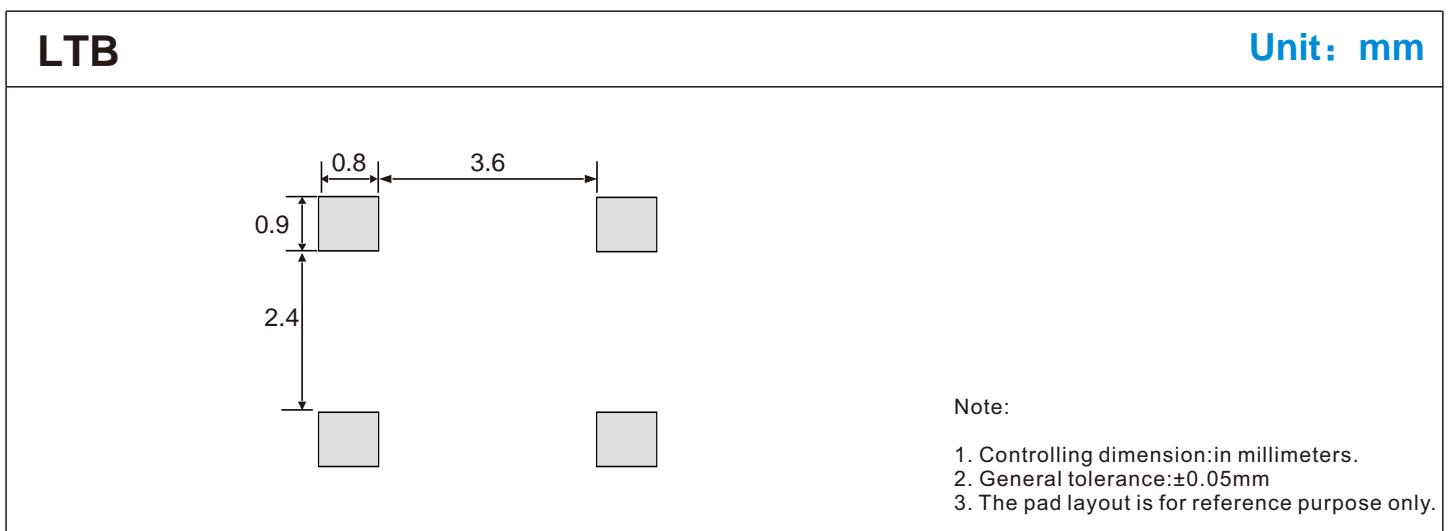
FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Package Outline

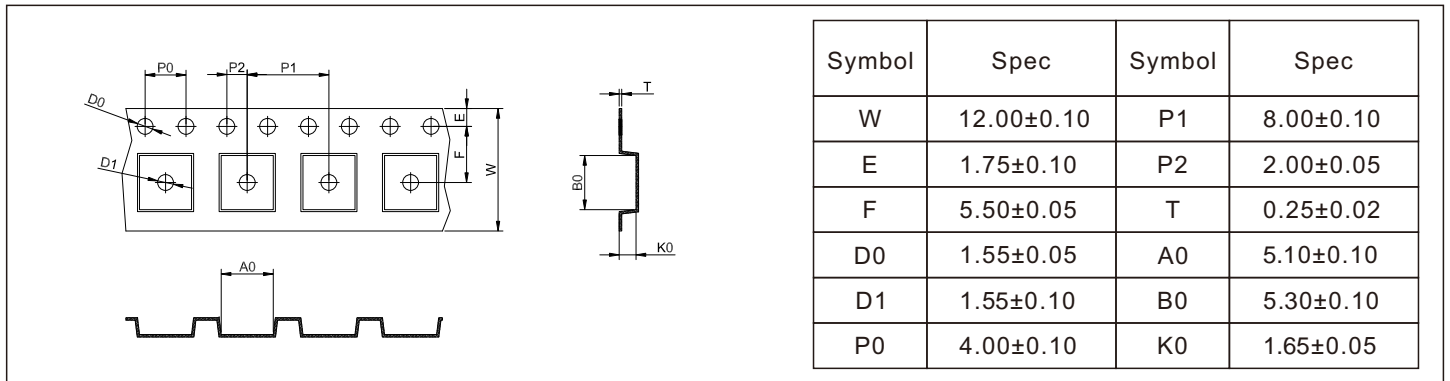


Suggested Pad Layout



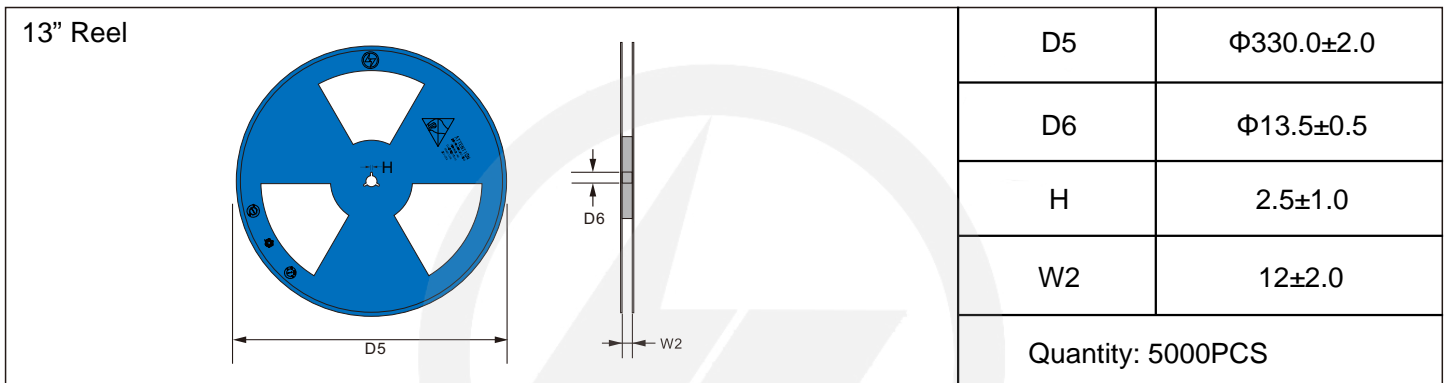
Carrier Tape Dimensions

Unit : mm

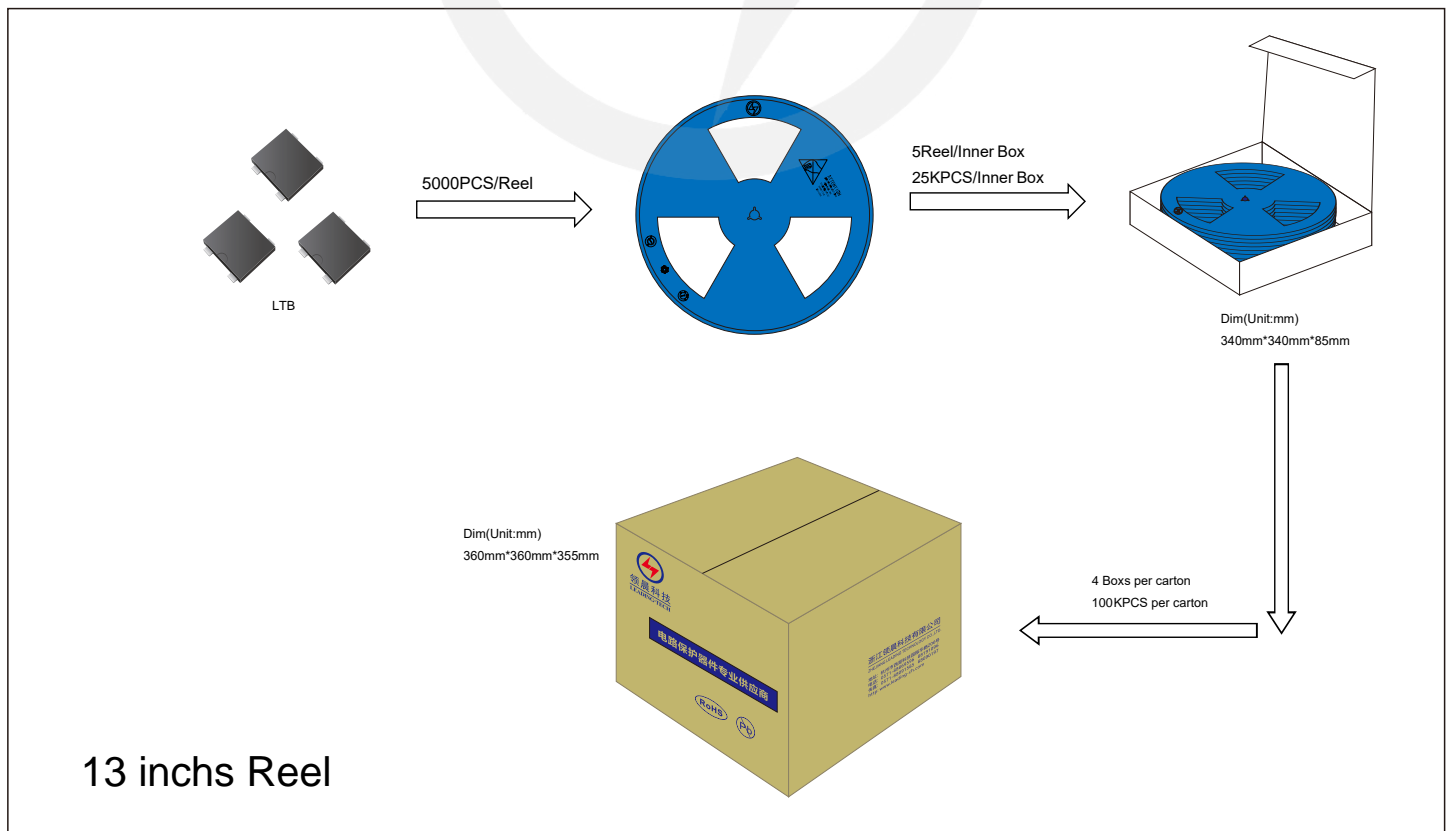


Reel Dimensions

Unit : mm

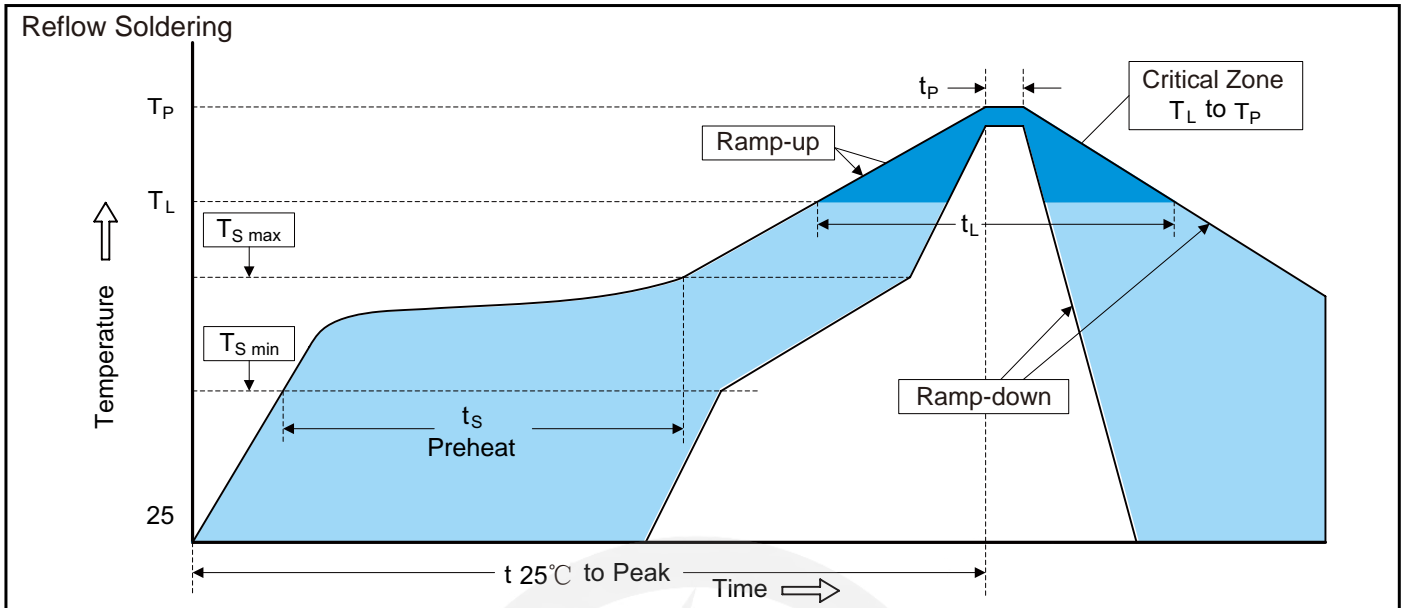


Packaging





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	2024.03.16	2024.03.16	1.0	New File	/	Ding	
02	2025.06.21	2025.06.21	1.1	Update packaging information	/	Ding	
03	2025.07.30	2025.07.30	1.2	Update Suggested Pad Layout	/	Ding	