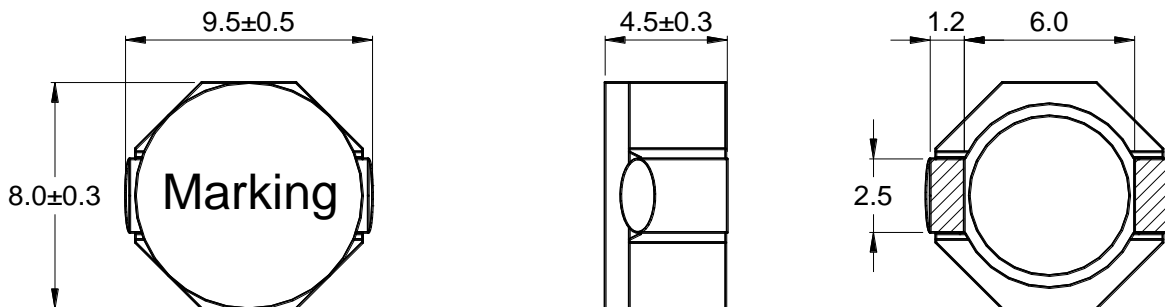




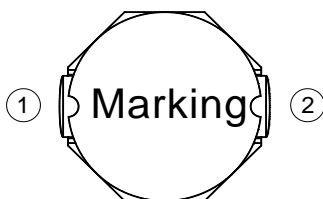
Outline: 产品概要

- Low profile, magnetic shielded structure.
超薄型, 磁性屏蔽结构。
- Lead free product, RoHS compliant.
无铅产品, 符合 RoHS 指令。
- Carrier tape packing, suitable for SMT process.
载带包装, 适用于回流焊 SMT 工艺。
- Widely used in buck converter, laptop, displayer, computer and peripherals, and etc.
广泛应用于升降压转换器, 笔记本电脑, 显示器, 电脑及其外围设备等。
- Operating temperature : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
(Including coil's temperature rise)
工作温度: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (包含线圈发热)

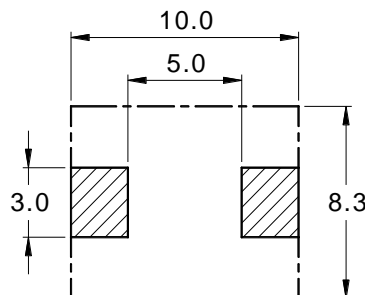
1 Appearance and dimensions (mm) 外形尺寸



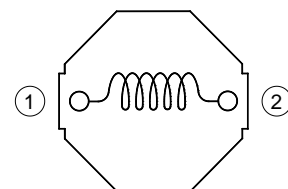
2 Marking 印字标识



3 Reference land pattern (mm) 参考基板尺寸



4 Schematic 原理图



5 Electrical characteristics

电气特性

Part No. 型号	Inductance (μH) 电感值 ※1	D.C.R. (mΩ) 直流电阻		Saturation current (A) 饱和电流 ※2		Temperature rise current (A) 温升电流 ※3
		Typical	Max	Typical	Max	Typical
SPDR8D43-1R0N	1.00 ±30%	7.10	8.52	11.0	8.80	7.00
SPDR8D43-2R2N	2.20 ±30%	10.8	13.0	7.50	6.00	5.67
SPDR8D43-3R3N	3.30 ±30%	12.8	15.4	7.00	5.60	5.21
SPDR8D43-4R7N	4.70 ±30%	23.0	27.6	5.40	4.32	3.89
SPDR8D43-6R8N	6.80 ±30%	26.0	31.2	4.80	3.84	3.66
SPDR8D43-8R2N	8.20 ±30%	33.0	39.6	4.40	3.52	3.24
SPDR8D43-100M	10.0 ±20%	44.0	52.8	3.70	2.96	2.81
SPDR8D43-150M	15.0 ±20%	55.0	66.0	3.20	2.56	2.51
SPDR8D43-220M	22.0 ±20%	94.0	113	2.60	2.08	1.92
SPDR8D43-330M	33.0 ±20%	116	139	2.15	1.72	1.73
SPDR8D43-470M	47.0 ±20%	165	198	1.80	1.44	1.45
SPDR8D43-680M	68.0 ±20%	266	319	1.45	1.16	1.14
SPDR8D43-820M	82.0 ±20%	294	353	1.32	1.06	1.09
SPDR8D43-101M	100 ±20%	385	462	1.23	0.98	0.95
SPDR8D43-151M	150 ±20%	610	732	0.97	0.78	0.75
SPDR8D43-221M	220 ±20%	815	978	0.83	0.66	0.65
SPDR8D43-331M	330 ±20%	1,180	1,416	0.66	0.53	0.54
SPDR8D43-471M	470 ±20%	1,840	2,208	0.56	0.45	0.43
SPDR8D43-681M	680 ±20%	2,660	3,192	0.47	0.38	0.36
SPDR8D43-821M	820 ±20%	2,910	3,492	0.43	0.34	0.35
SPDR8D43-102M	1,000 ±20%	4,000	4,800	0.38	0.30	0.29

■ All data is tested based on 25°C ambient temperature.

所有数据基于环境温度 25°C 条件下测试。

※1 Inductance measure condition at 100kHz, 0.1V.

电感测试条件为 100kHz, 0.1V。

※2 Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.

饱和电流: 电感值下降其初始值的 20% 时所加载的实际直流电流值。

※3 Temperature rise current: the actual value of DC current when the temperature rise is ΔT40°C (Ta=25°C).

温升电流: 使产品温度上升到 ΔT40°C 时所加载的实际直流电流值 (Ta=25°C)。

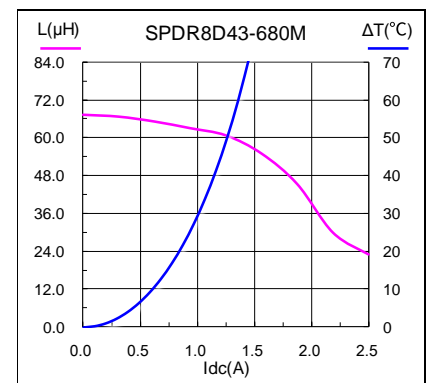
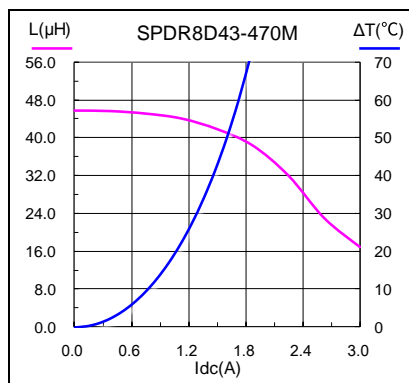
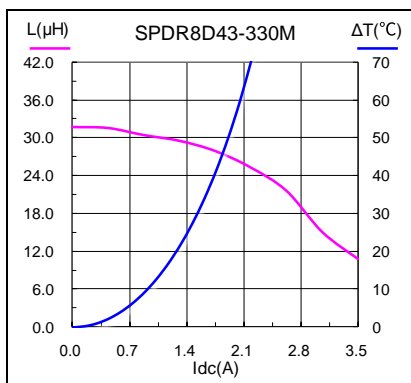
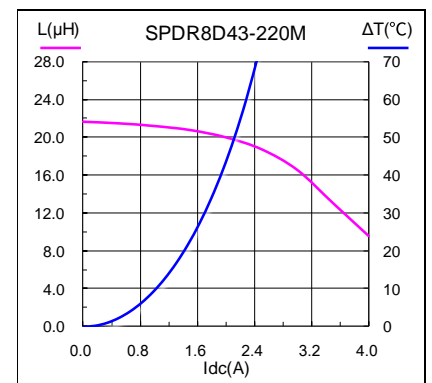
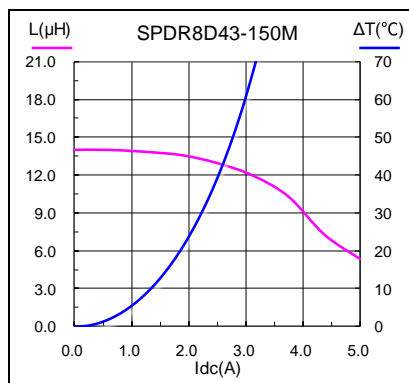
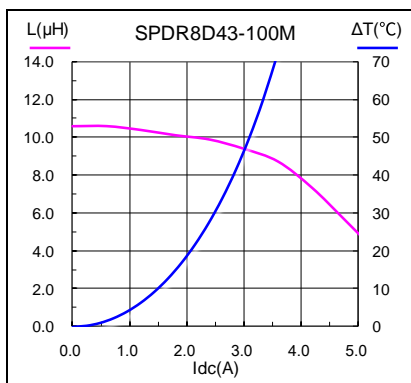
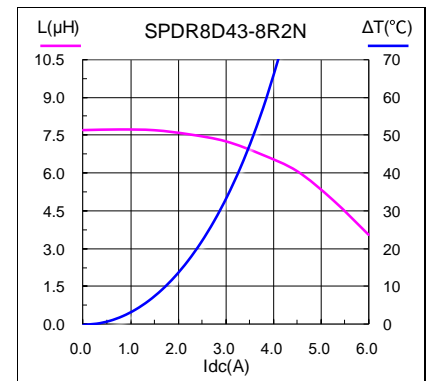
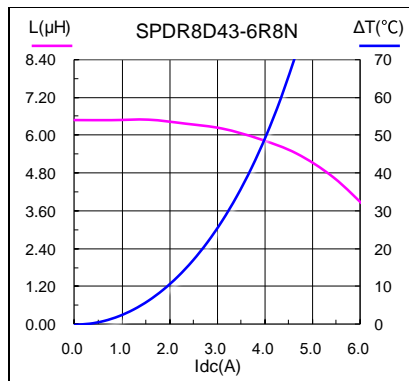
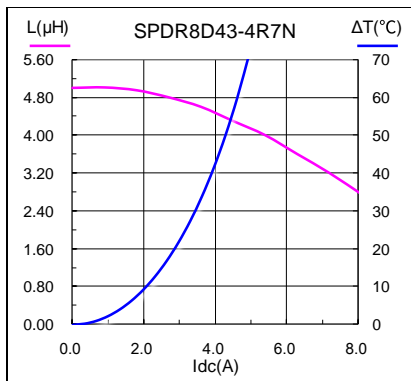
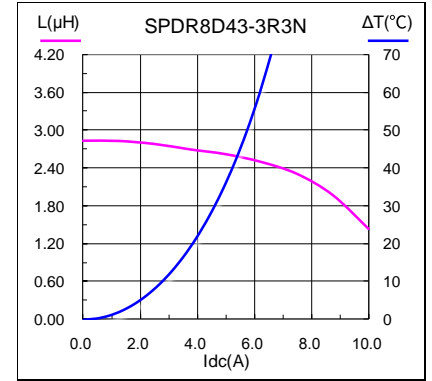
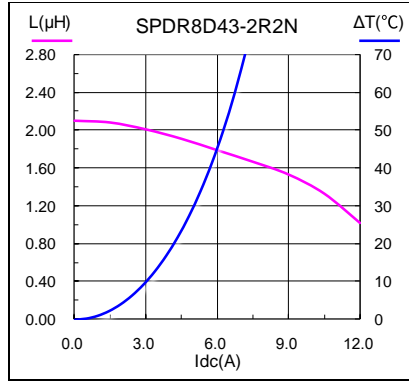
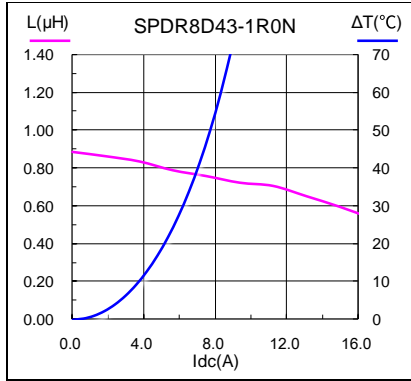
※ Special remind: Circuit design, component placement, PWB size and thickness, cooling system and etc.

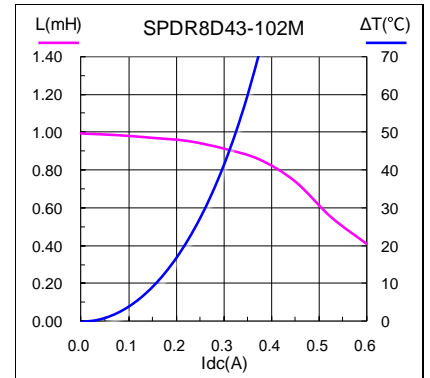
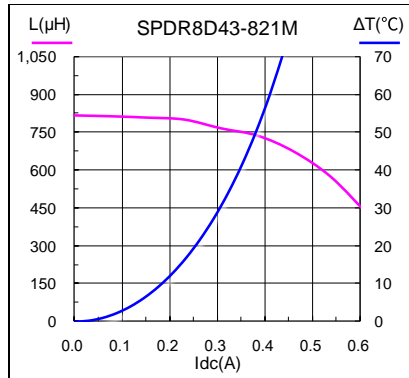
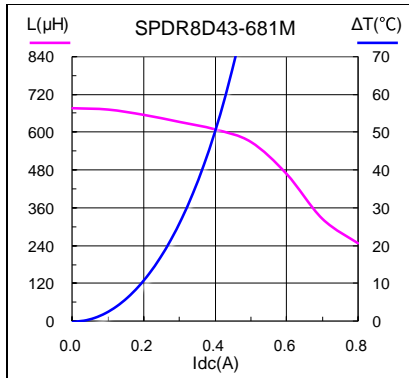
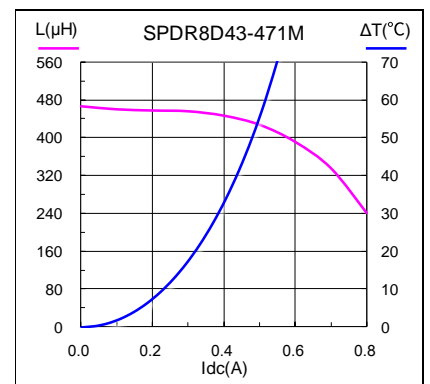
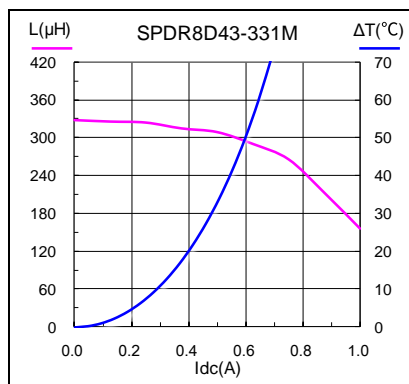
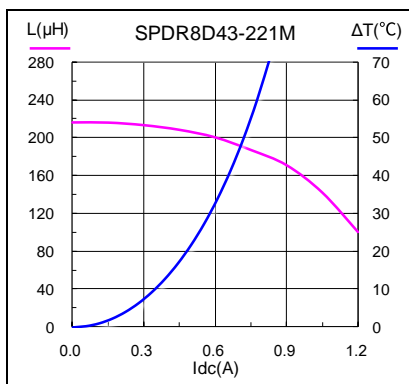
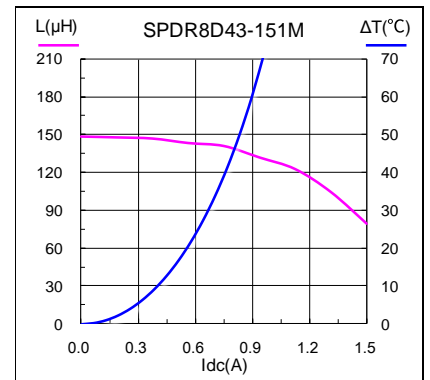
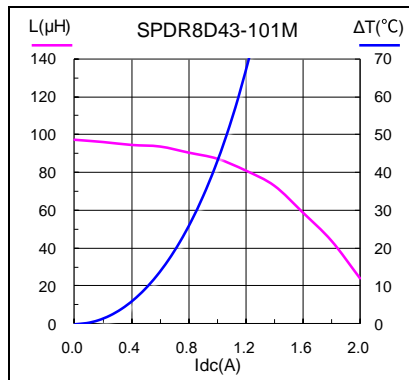
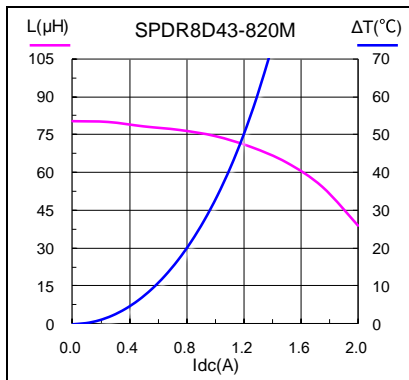
all will affect the product temperature. Please verify the product temperature in the final application.

特别提醒: 线路设计, 组件布局, 印刷线路板(PWB)尺寸及厚度, 散热系统等均会影响产品温度。

请务必在最终应用时, 验证产品发热状况。

**6 Saturation current VS temperature rise current curve
饱和电流 VS 温升电流曲线**



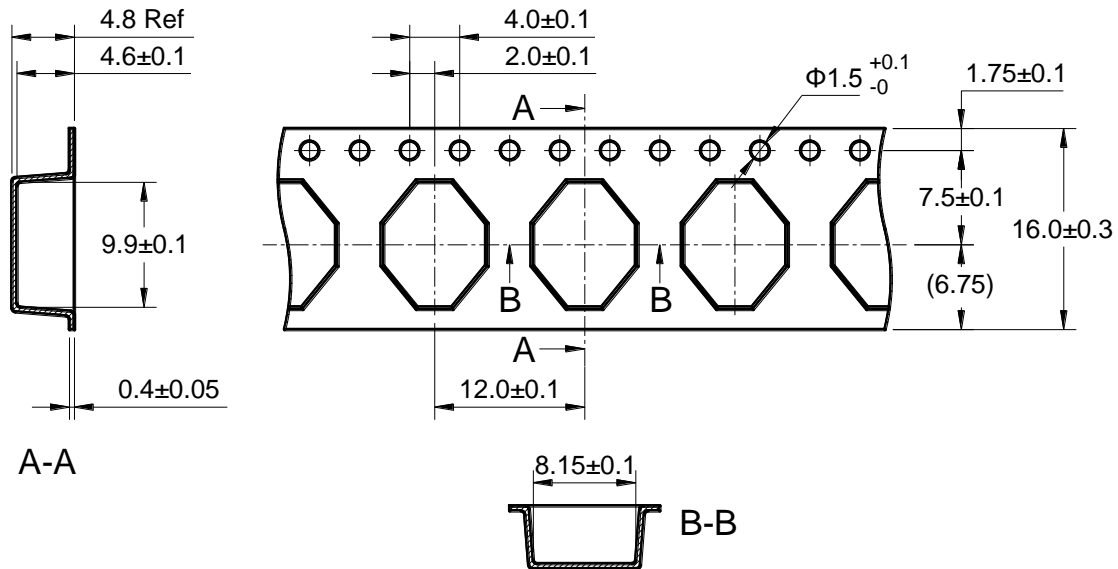


7 Packing specification

包装规格

7.1 Carrier tape dimensions (mm)

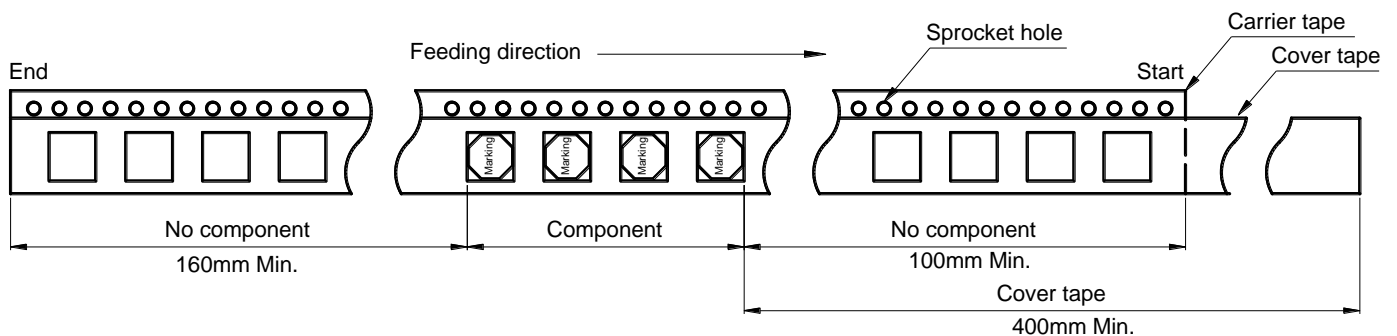
载带尺寸



※ Packing is referred to the international standard IEC 60286-3.
包装参照国际标准 IEC 60286-3。

7.2 Tape direction

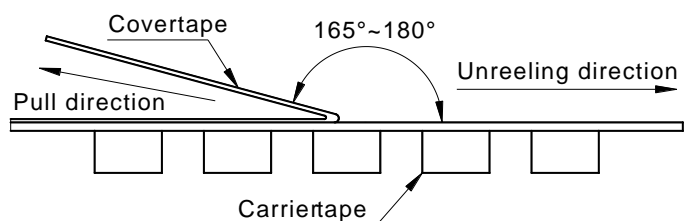
捆包方向



7.3 Cover tape peel off condition

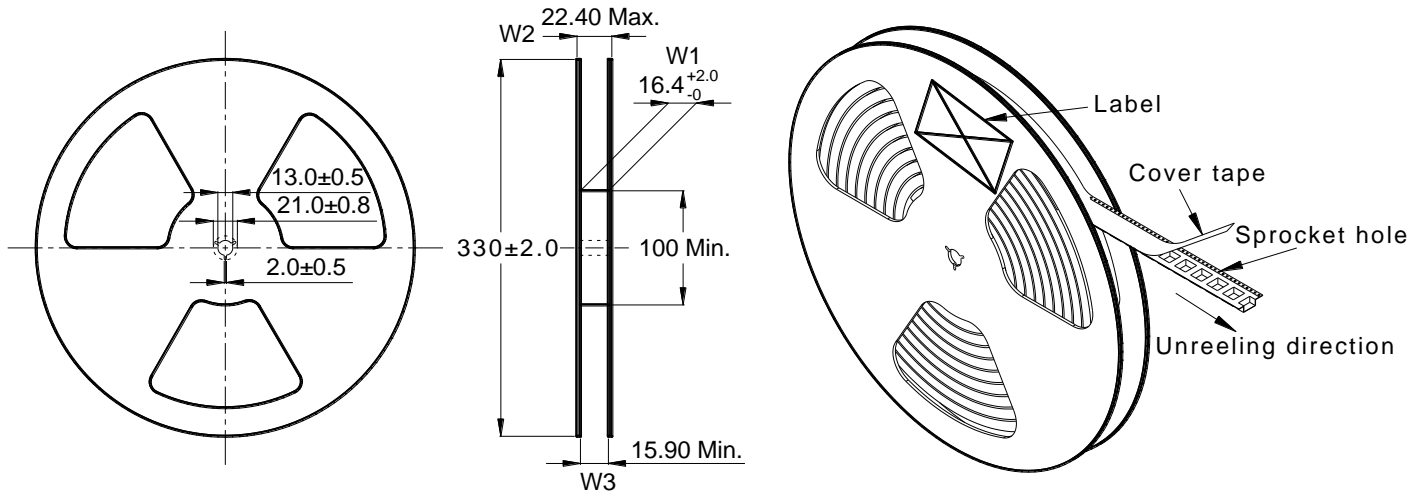
盖带剥离条件

- Cover tape peel force shall be 0.1 to 1.3N.
盖带剥离力度为 0.1~1.3N。
- Reference peel speed 300±10mm/min.
参考剥离速度 300±10mm/分钟。



7.4 Reel dimensions (mm)

卷盘尺寸



7.5 Carton dimensions and packing quantity

包装箱尺寸和包装数量

■ Inner Carton: 365×345×105mm
内包装盒

■ Out Carton : 385×365×245mm
外包装箱

Product Series 产品系列	Quantity / Reel 数量 / 卷	Inner Carton Quantity 内盒 包装数量	Out Carton Quantity 外箱 包装总数量
SPDR8D43	1000pcs	(1000×4) = 4000pcs	(4000×2) = 8000pcs

7.6 Label making

标签标识

The following items will be marked on the reel of product label and shipping label.
以下项目将明确标识于产品卷盘标签以及运输标签上。

Production Label 产品标签
■ Part No. 产品型号
■ Electrical Information 产品电性信息
■ Quantity 数量
■ Packing No. 包装流水号

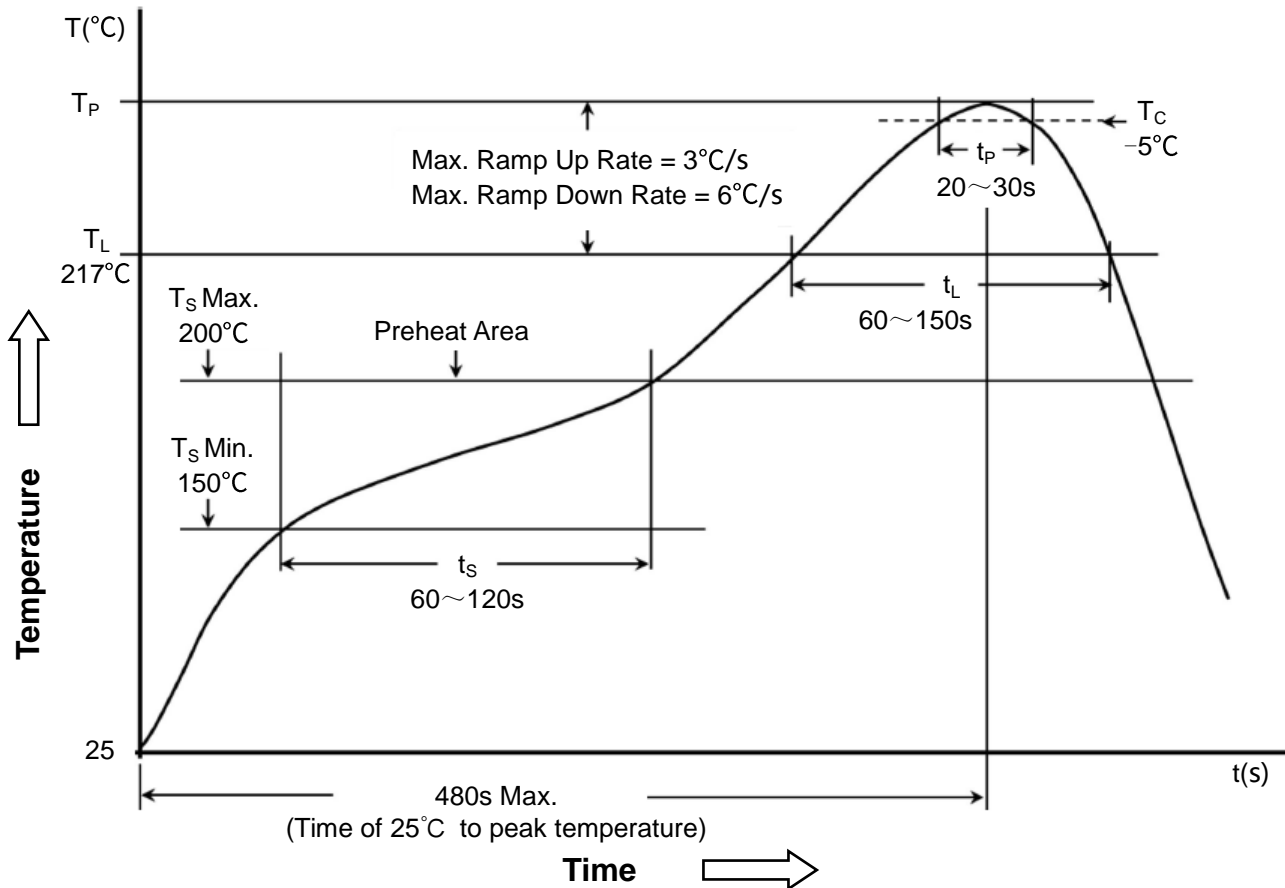
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

8 Soldering specification

焊接规格

8.1 Reflow profile for SMT components

SMT 回流焊温度曲线



8.2 Classification of peak package body temperature (T_P)

封装体峰值温度(T_P)分类

	Package Thickness 封装厚度	Package Volume 封装体积		
		<350 mm ³	350~2000 mm ³	>2000 mm ³
PB-Free Assembly 无铅装配	<1.6mm	260°C	260°C	260°C
	1.6~2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.
回流焊参照标准 IPC/JEDEC J-STD-020D.