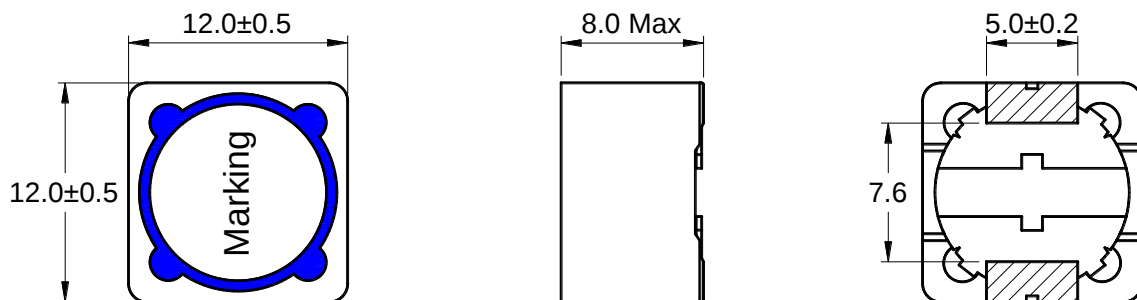




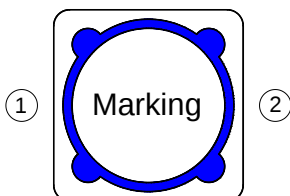
Outline: 产品概要

- Low DCR, high rated current.
低直流电阻, 耐大电流。
- Magnetic shielded structure
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, network communication equipment, and etc.
广泛应用于升降压转换器, 笔记本电脑, 显示器, 网络通信设备等。
- 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)

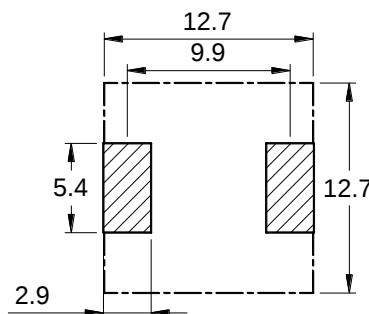
1 Appearance and dimensions (mm) 外形尺寸



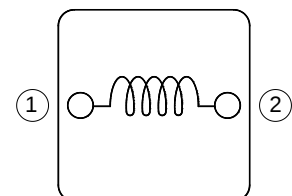
2 Marking 印字标识



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 ±20%	D.C.R. (mΩ) 直流电阻		Saturation current (A) 饱和电流 ※2 Typical	Temperature rise current (A) 温升电流 ※3 Typical
		Typical	Max		
SPRH127-2R2M	2.20	13.7	16.4	20.00	6.00
SPRH127-3R3M	3.30	13.9	16.6	16.00	5.70
SPRH127-4R7M	4.70	14.5	17.4	14.00	5.50
SPRH127-6R8M	6.80	15.6	18.7	12.00	5.00
SPRH127-100M	10.0	22.3	26.8	10.50	4.50
SPRH127-150M	15.0	34.0	40.8	8.00	4.20
SPRH127-200M	20.0	45.0	54.0	6.90	3.90
SPRH127-220M	22.0	58.0	69.6	6.80	3.80
SPRH127-330M	33.0	68.5	82.2	5.30	4.00
SPRH127-470M	47.0	93.0	112	4.50	3.00
SPRH127-680M	68.0	114	137	3.50	2.70
SPRH127-101M	100	173	208	3.20	2.20
SPRH127-151M	150	244	293	2.60	1.90
SPRH127-181M	180	286	343	2.50	1.50
SPRH127-221M	220	329	394	2.20	1.60
SPRH127-331M	330	447	537	1.80	1.20
SPRH127-471M	470	730	875	1.50	1.00
SPRH127-681M	680	890	1,060	1.30	0.80
SPRH127-821M	820	1,280	1,536	1.20	0.70
SPRH127-102M	1,000	1,460	1,750	1.00	0.70

■ 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 $\Delta T40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).

温升电流: 使产品温度上升到 $\Delta T40^{\circ}\text{C}$ 时所加载的实际直流电流值($T_a=25^{\circ}\text{C}$)。

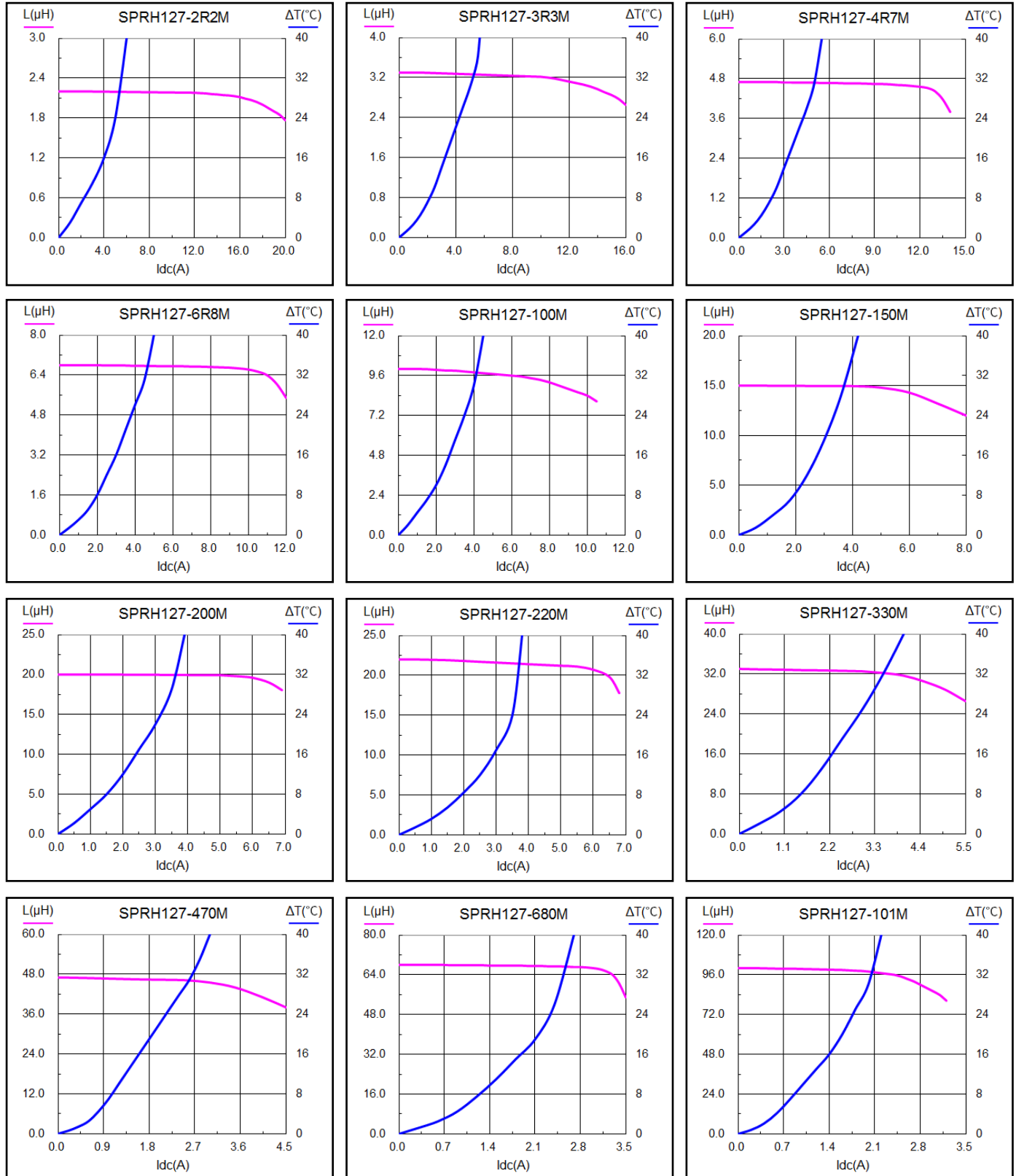
※ Special remind: Circuit design, component placement, PWB size and thickness, cooling system and etc.

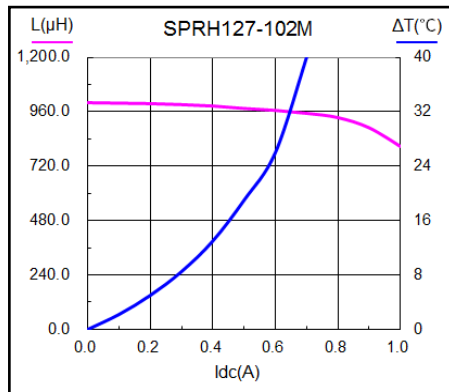
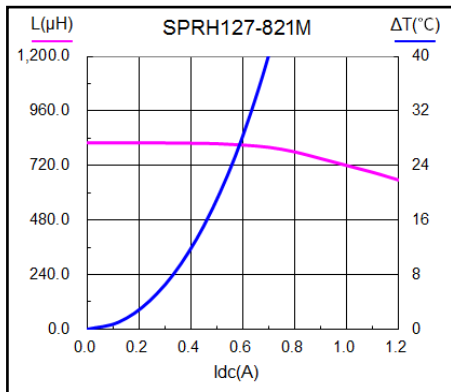
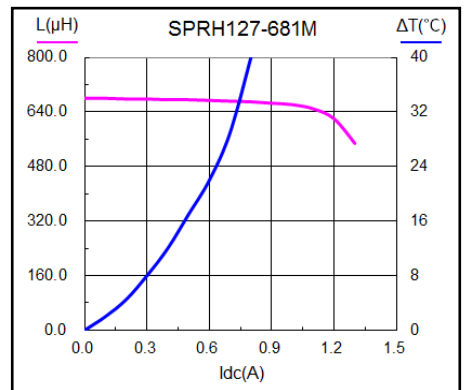
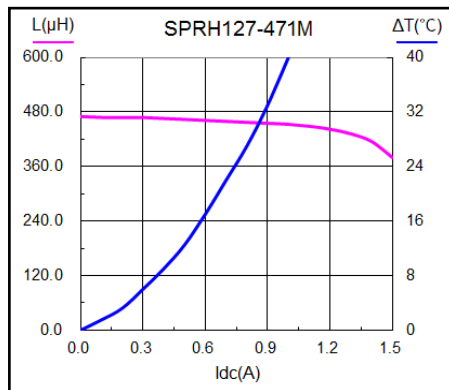
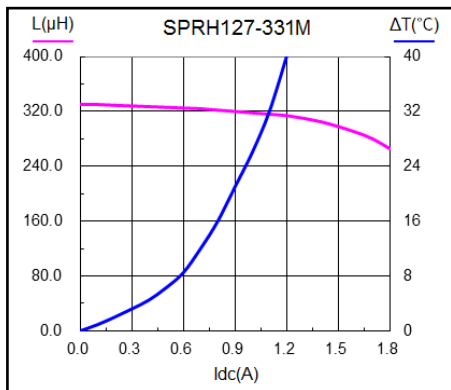
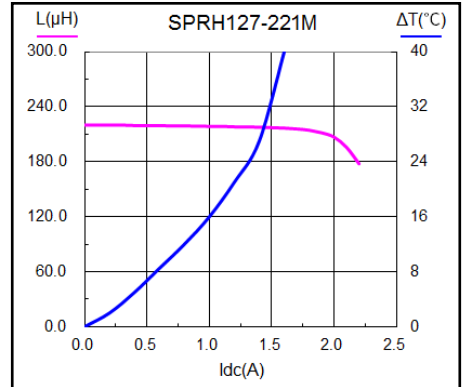
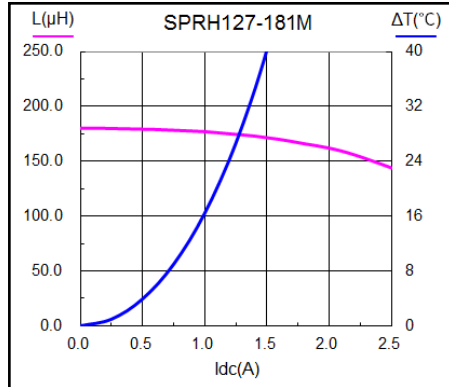
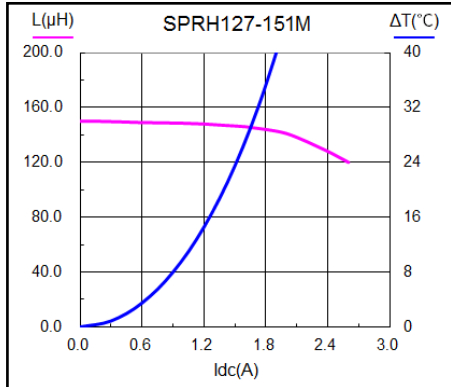
all will affect the product temperature. Please verify the product temperature in the final application.

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**



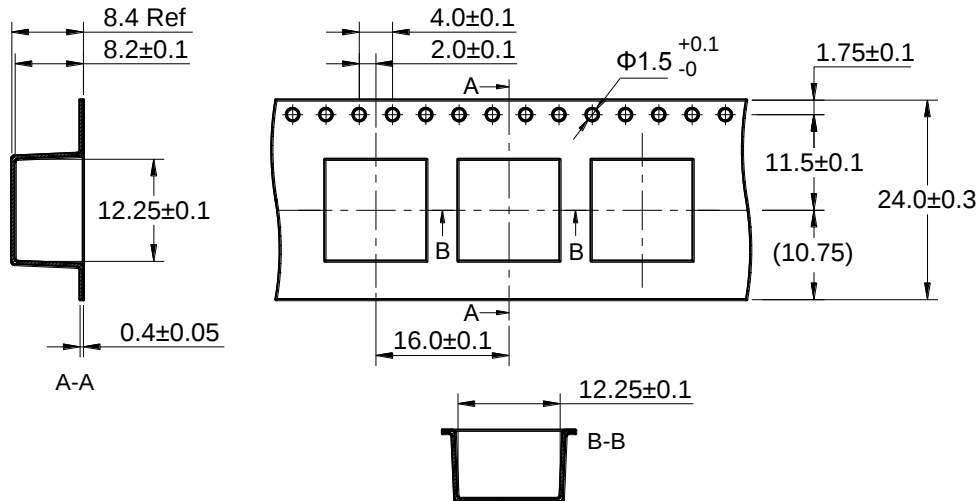


7 Packing specification

包装规格

7.1 Carrier tape dimensions (mm)

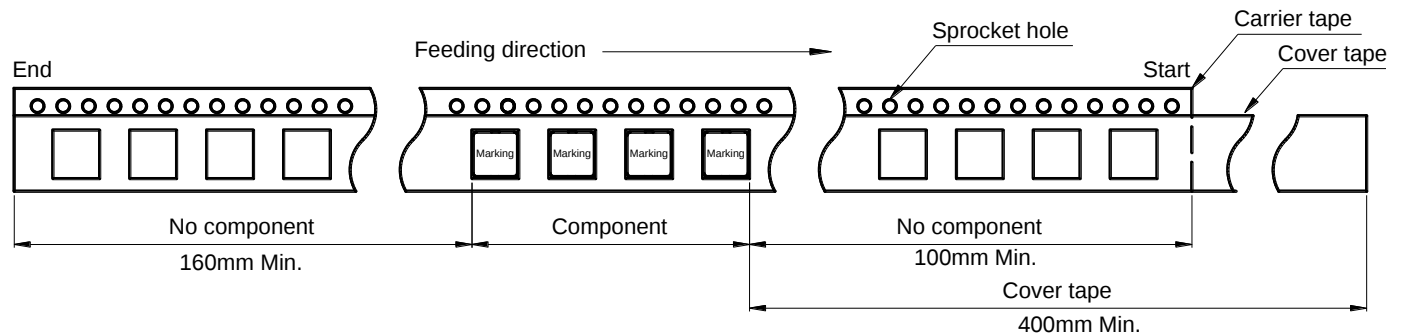
载带尺寸



※ 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

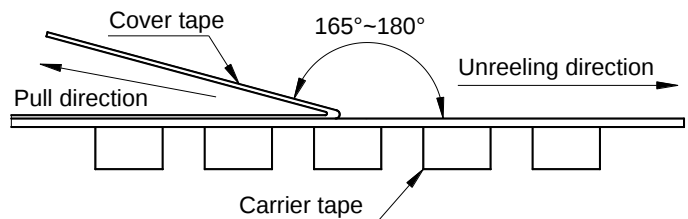
捆包方向



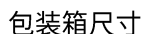
7.3 Cover tape peel off condition

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。



卷盘尺寸



- 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。

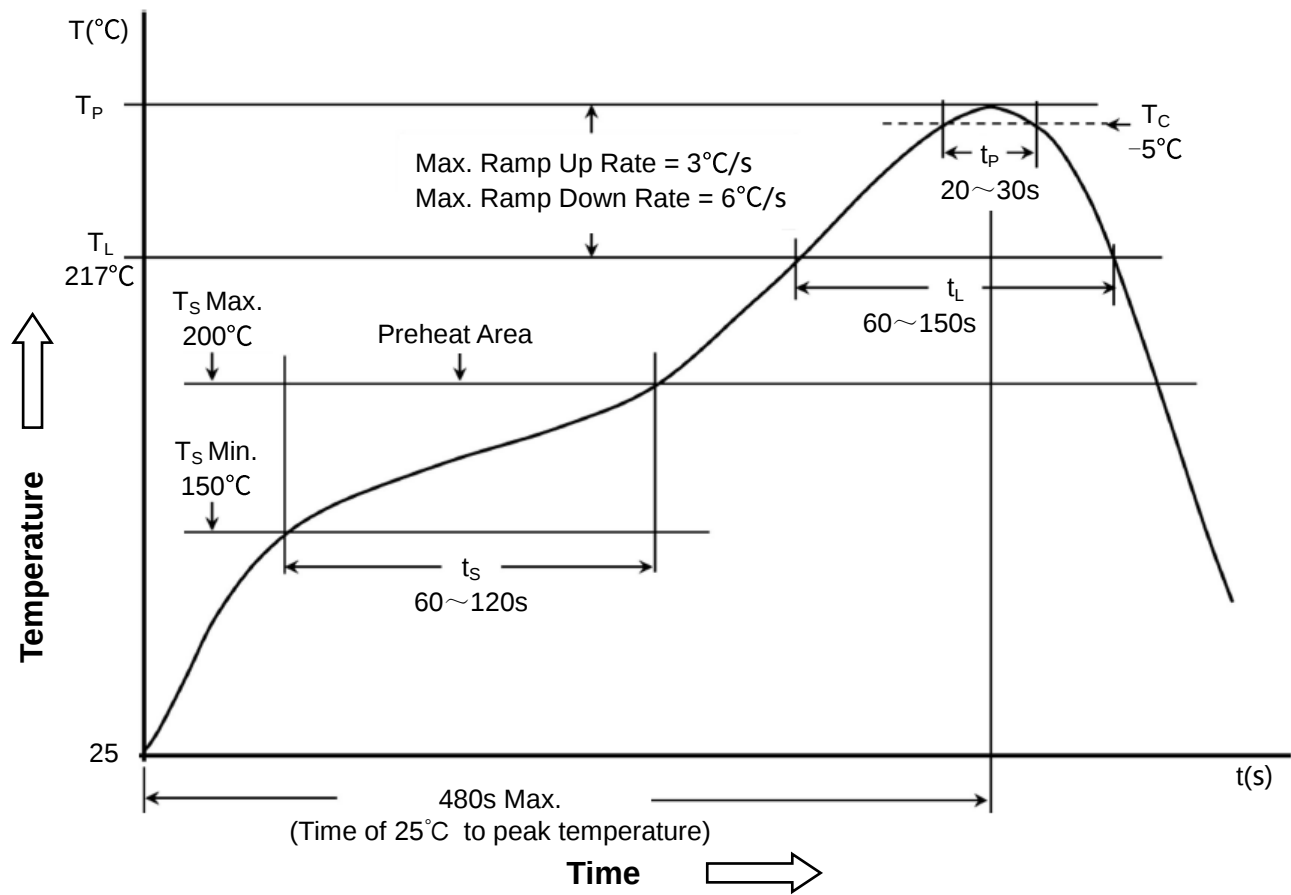
深圳市科达嘉电子有限公司
SHENZHEN CODACA ELECTRONIC CO., LTD

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。