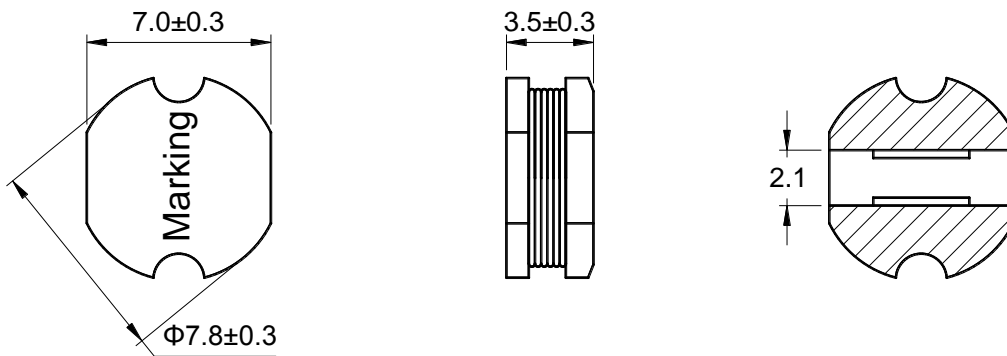


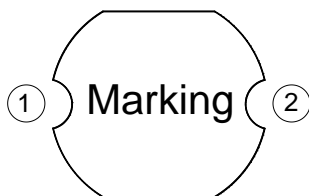
**Outline:
产品概要**

- Small size, high rated current, low DCR.
小尺寸，耐大电流，低直流电阻。
- 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, displayer, laptop, network communication equipment, and etc.
广泛应用于升降压转换器，显示器，笔记本电脑，网络通信设备等。
- Operating temperature : -40°C ~ +125°C
(Including coil's temperature rise)
工作温度：-40°C ~ +125°C (包含线圈发热)

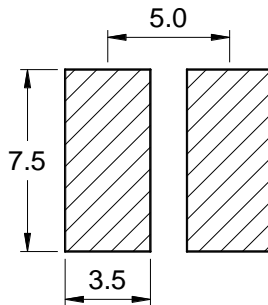
**1 Appearance and dimensions (mm)
外形尺寸**



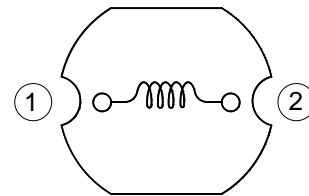
**2 Marking
印字标识**



**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 (μ H) 电感值 ※1 $\pm 10\%$	D.C.R. ($m\Omega$) 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		
SP73-100K	10.0	48.5	58.2	2.80	2.60
SP73-150K	15.0	70.0	84.0	2.60	2.00
SP73-220K	22.0	98.5	118	2.10	1.40
SP73-330K	33.0	135	162	1.80	1.10
SP73-470K	47.0	196	235	1.40	0.90
SP73-680K	68.0	265	318	1.20	0.80
SP73-101K	100	399	479	1.11	0.70
SP73-151K	150	402	482	0.90	0.60
SP73-221K	220	894	1,070	0.66	0.40
SP73-331K	330	1,250	1,500	0.55	0.30
SP73-471K	470	1,700	2,040	0.48	0.25
SP73-681K	680	2,890	3,470	0.38	0.20
SP73-102K	1,000	4,750	5,700	0.30	0.18

■ 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。

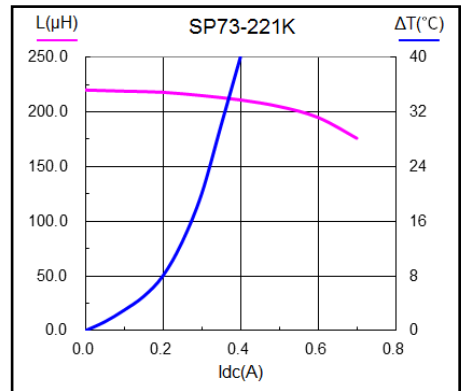
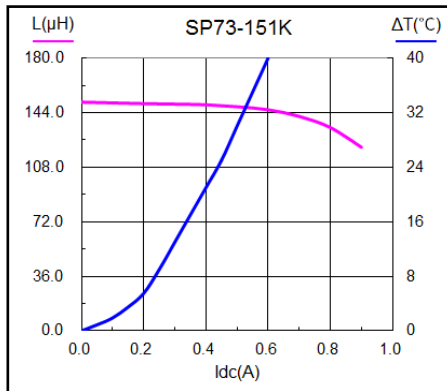
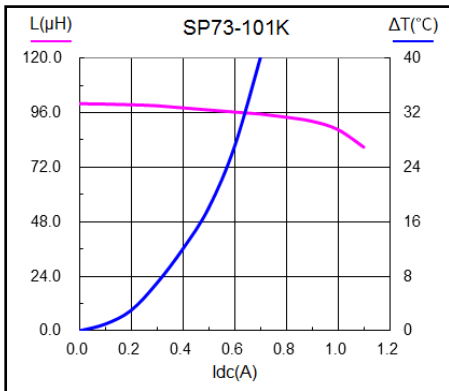
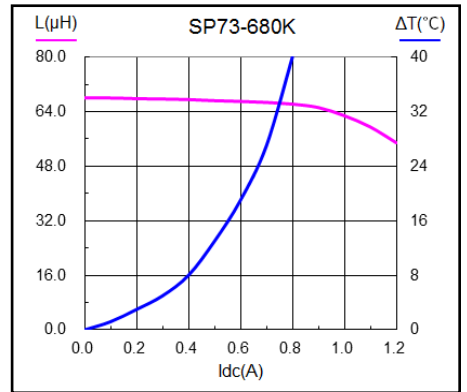
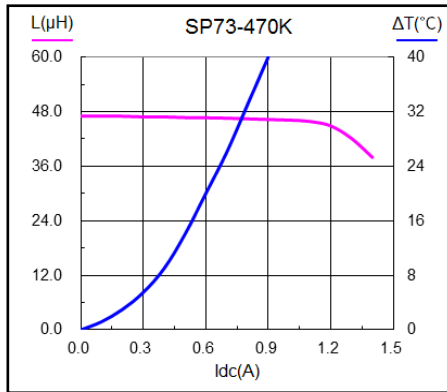
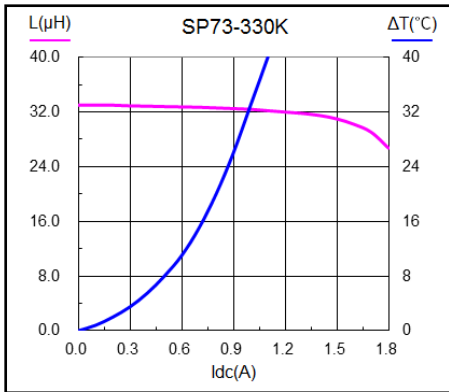
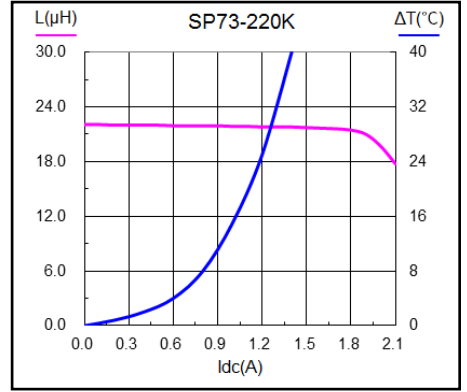
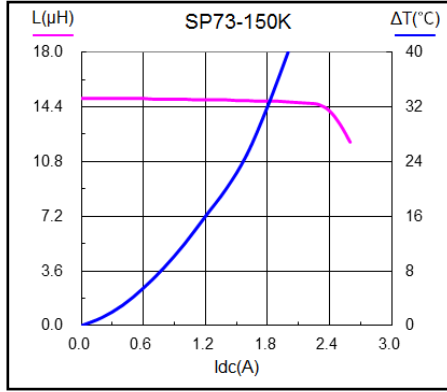
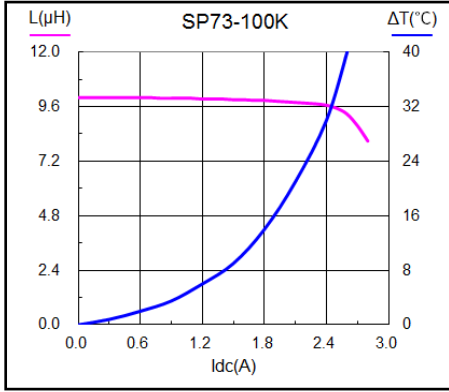
※1 Inductance measure condition at 1kHz, 0.25V.
电感测试条件为 1kHz, 0.25V。

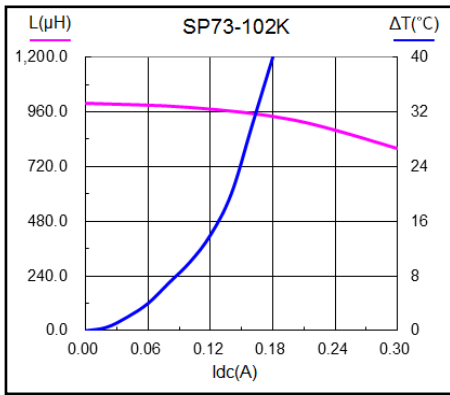
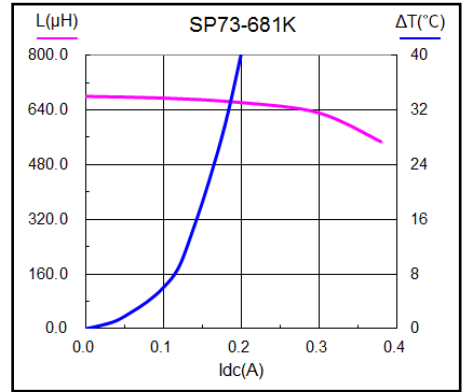
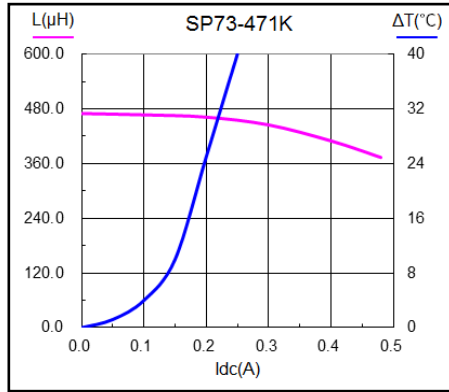
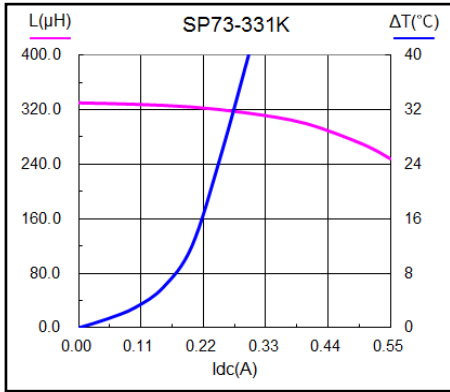
※2 Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.
饱和电流: 电感值下降其初始值的 20% 时所加载的实际直流电流值。

※3 Temperature rise current: the actual value of DC current when the temperature rise is $\Delta T 40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).
温升电流: 使产品温度上升到 $\Delta T 40^{\circ}\text{C}$ 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, 印刷电路板(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**



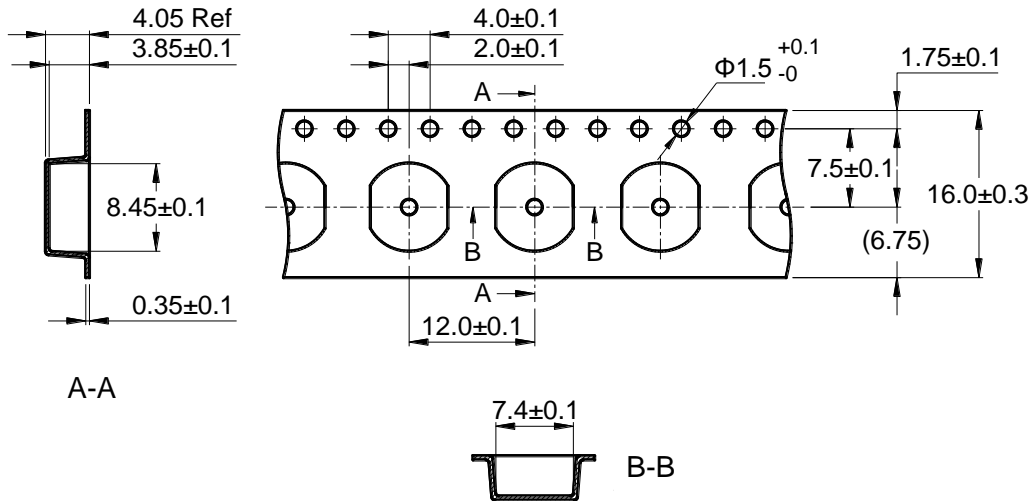


7 Packing specification

包装规格

7.1 Carrier tape dimensions (mm)

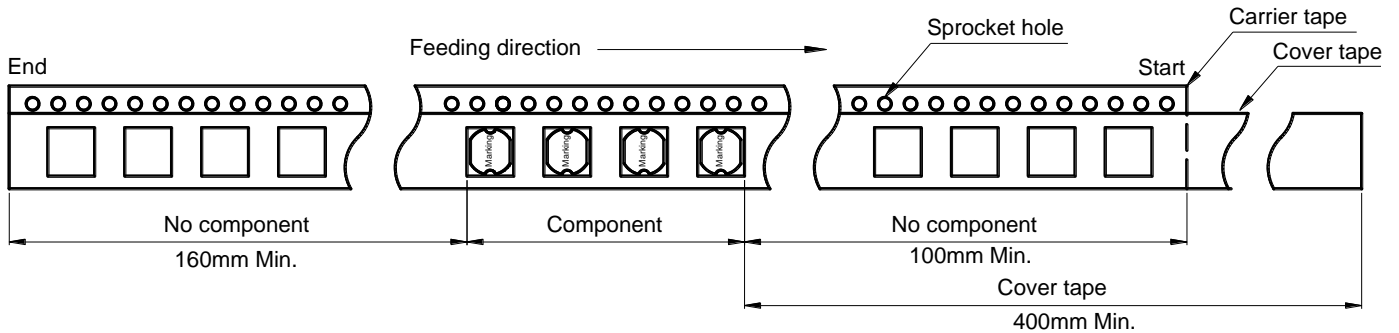
载带尺寸



※ 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

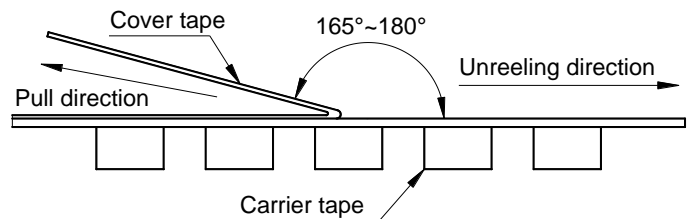
捆包方向



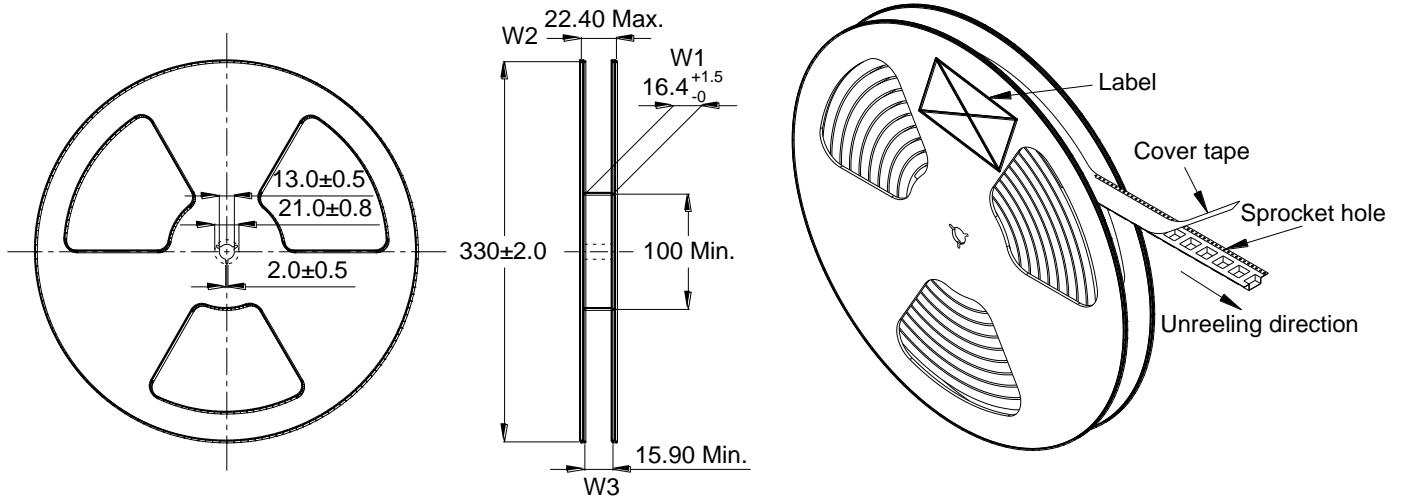
7.3 Cover tape peel off condition

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 包装箱尺寸

- 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 总包装数量
SP73	1000pcs	4000pcs = (4×1000)	8000pcs = (2×4000)

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

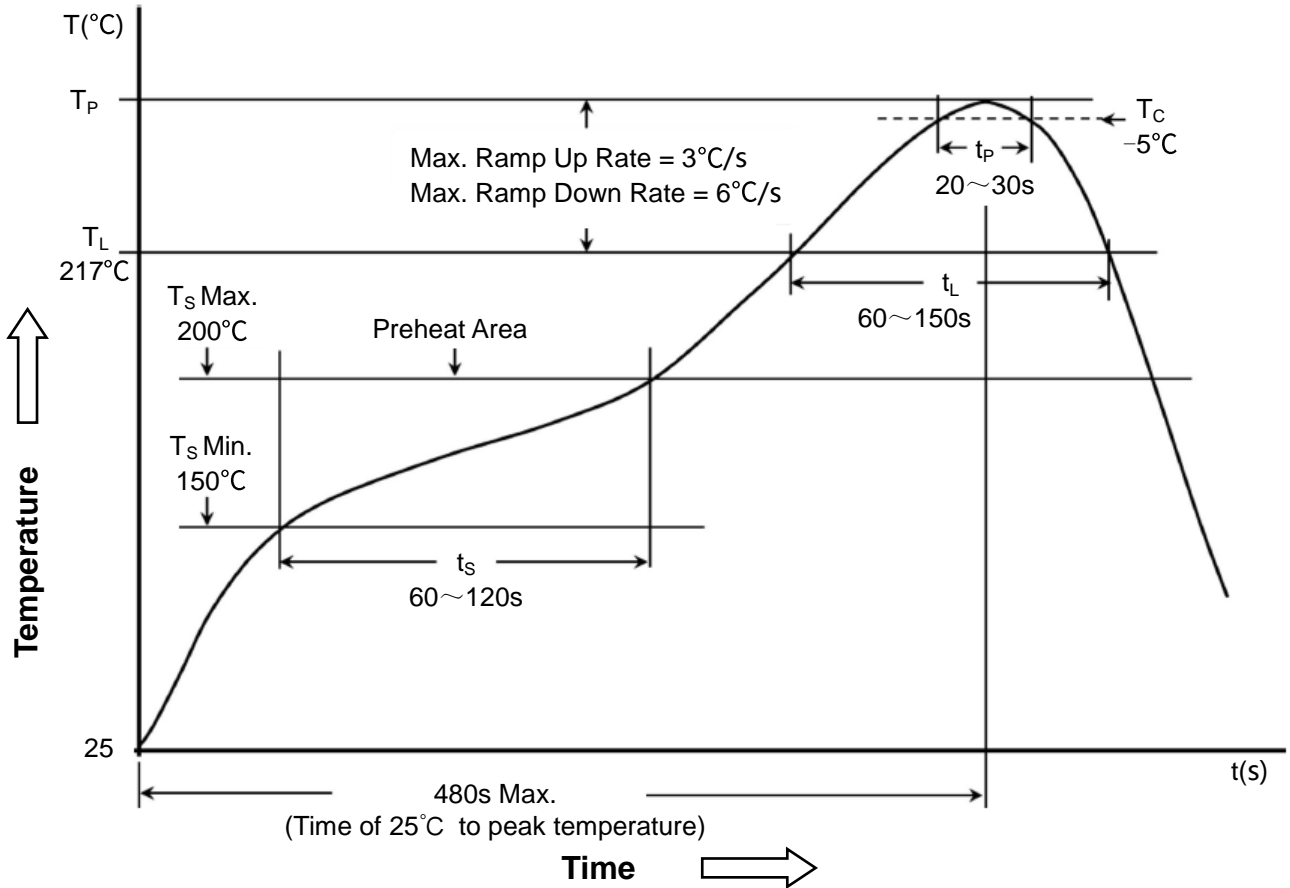
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

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 (Tp)

封装体峰值温度(Tp)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。