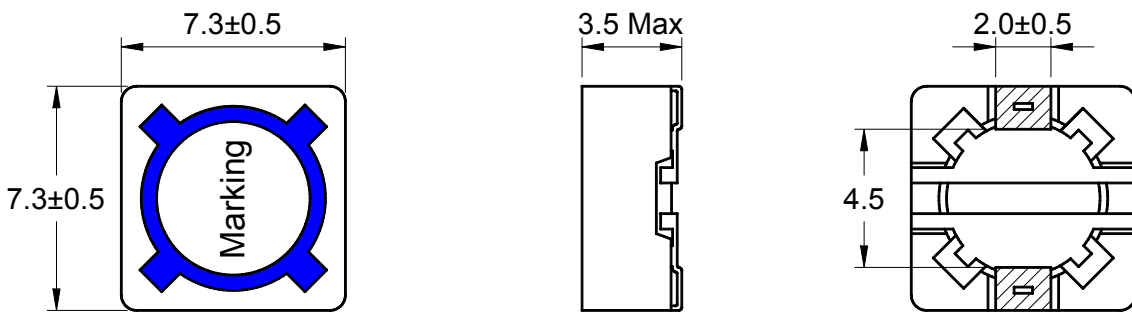


**Outline:  
产品概要**

- 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°C ~ +125°C  
(Including coil's temperature rise)  
工作温度: -40°C ~ +125°C (包含线圈发热)

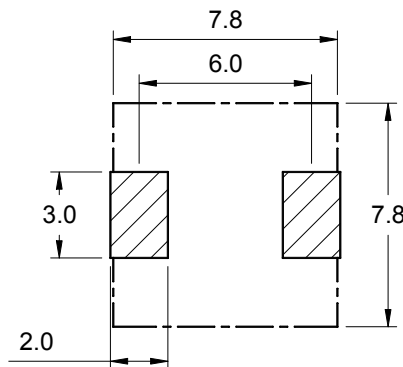
**1 Appearance and dimensions (mm)  
外形尺寸**



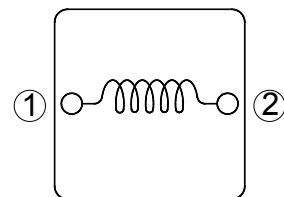
**2 Marking  
印字标识**



**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 (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		
SPRH73-2R2M	2.20	38.3	45.9	5.00	3.00
SPRH73-4R7M	4.70	45.8	55.0	3.60	2.60
SPRH73-6R8M	6.80	50.0	60.0	3.00	2.20
SPRH73-100M	10.0	57.5	69.0	2.10	1.90
SPRH73-220M	22.0	139	166	1.70	1.20
SPRH73-330M	33.0	178	213	1.40	1.00
SPRH73-470M	47.0	303	364	1.20	0.70
SPRH73-680M	68.0	380	456	0.90	0.60
SPRH73-101M	100	534	640	0.80	0.40
SPRH73-221M	220	1,180	1,410	0.55	0.30
SPRH73-331M	330	1,470	1,760	0.45	0.25
SPRH73-471M	470	2,470	2,960	0.30	0.20
SPRH73-102M	1,000	5,460	6,550	0.15	0.14

■ 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。

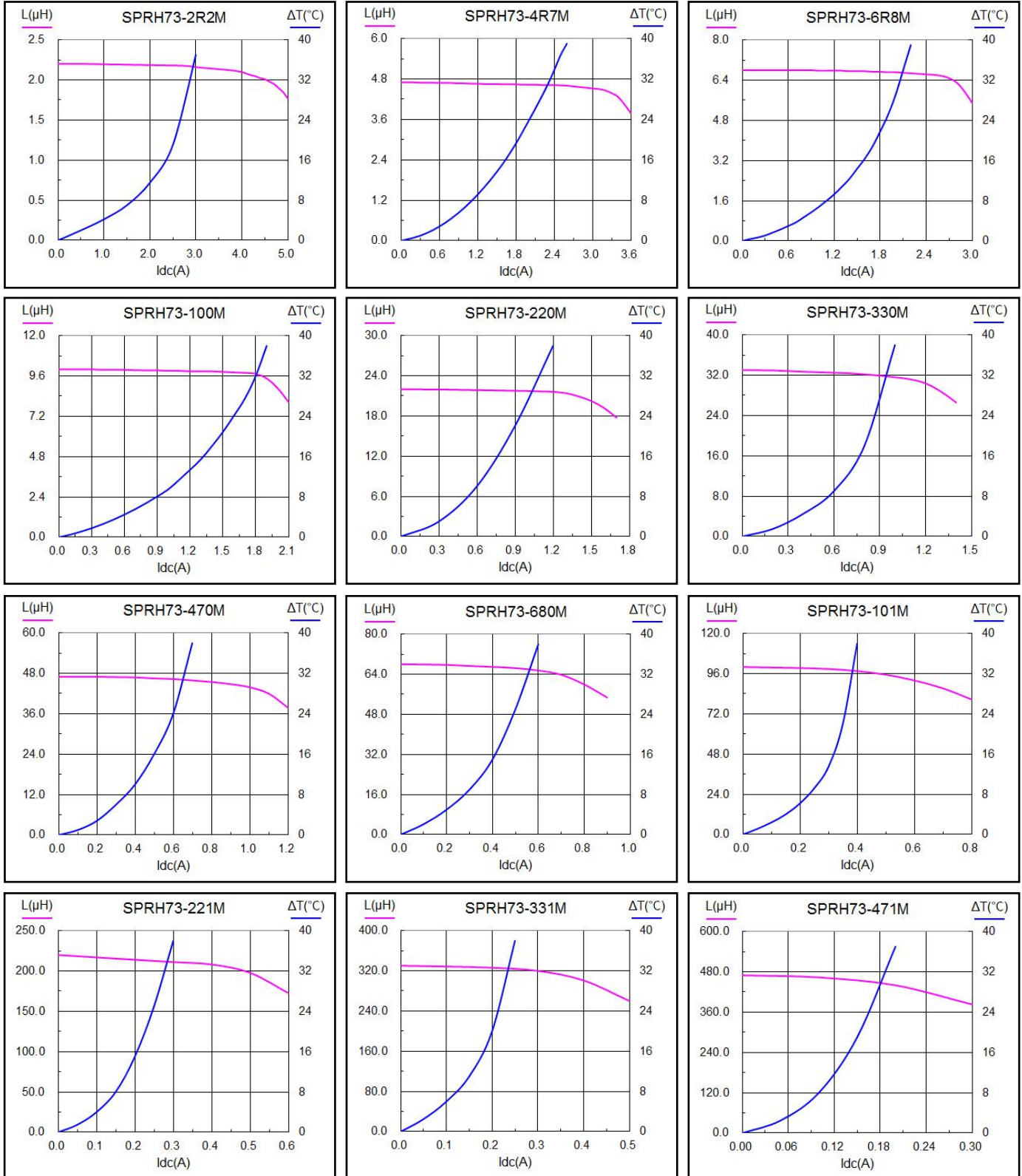
※1 Inductance measure condition at 100kHz, 0.1V.  
电感测试条件为 100kHz, 0.1V。

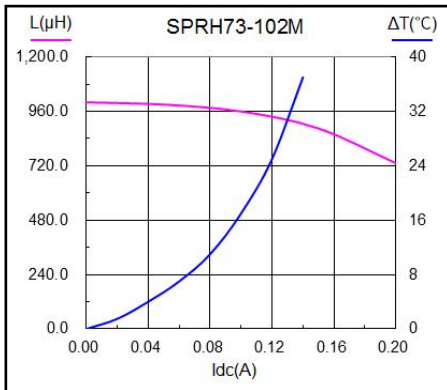
※2 Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.  
饱和电流: 电感值下降其初始值的 20%时所加载的实际直流电流值。

※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**



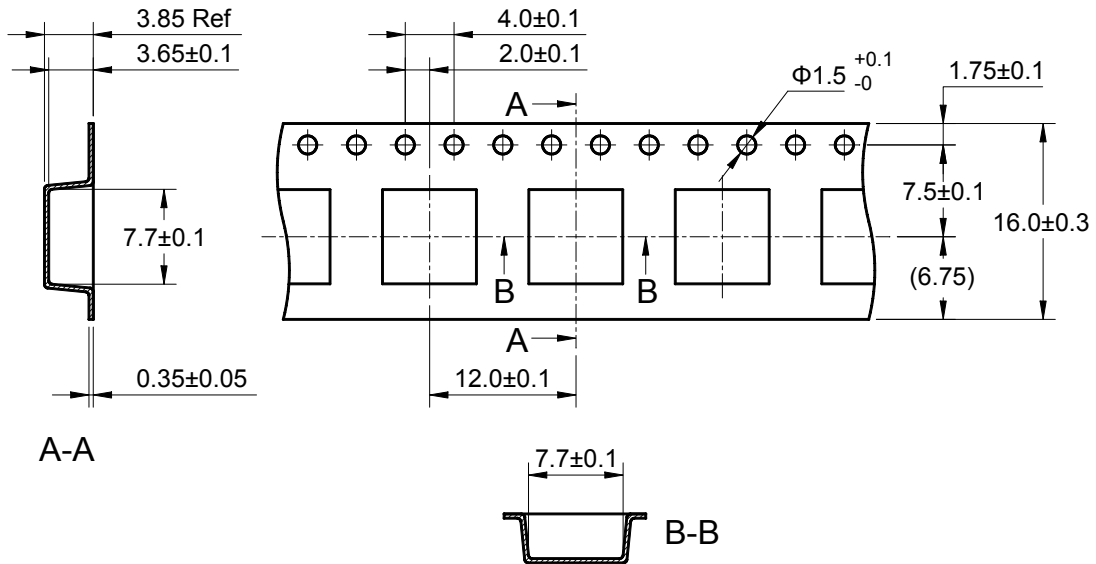


**7 Packing specification**

**包装规格**

**7.1 Carrier tape dimensions (mm)**

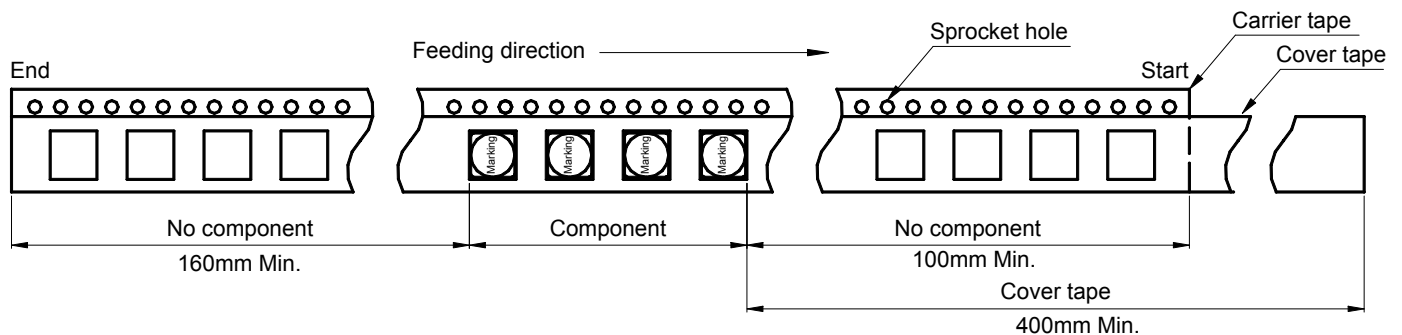
**载带尺寸**



※ 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**

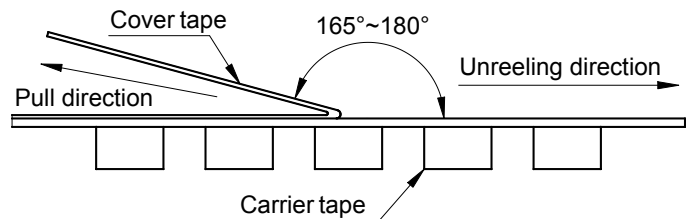
**捆包方向**



**7.3 Cover tape peel off condition**

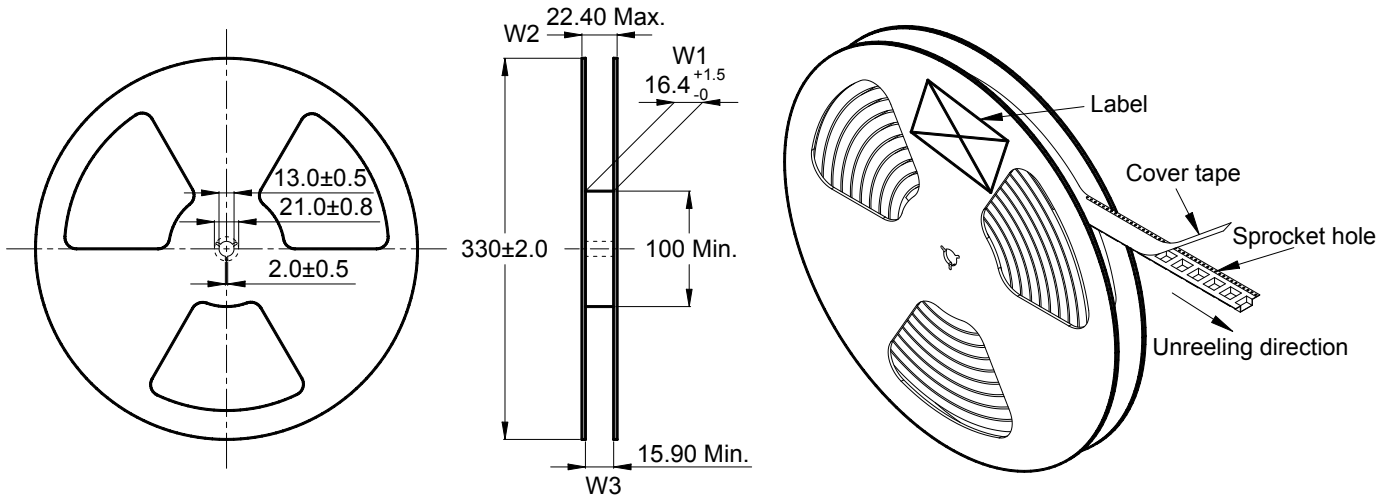
**盖带剥离条件**

- 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

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
SPRH73	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

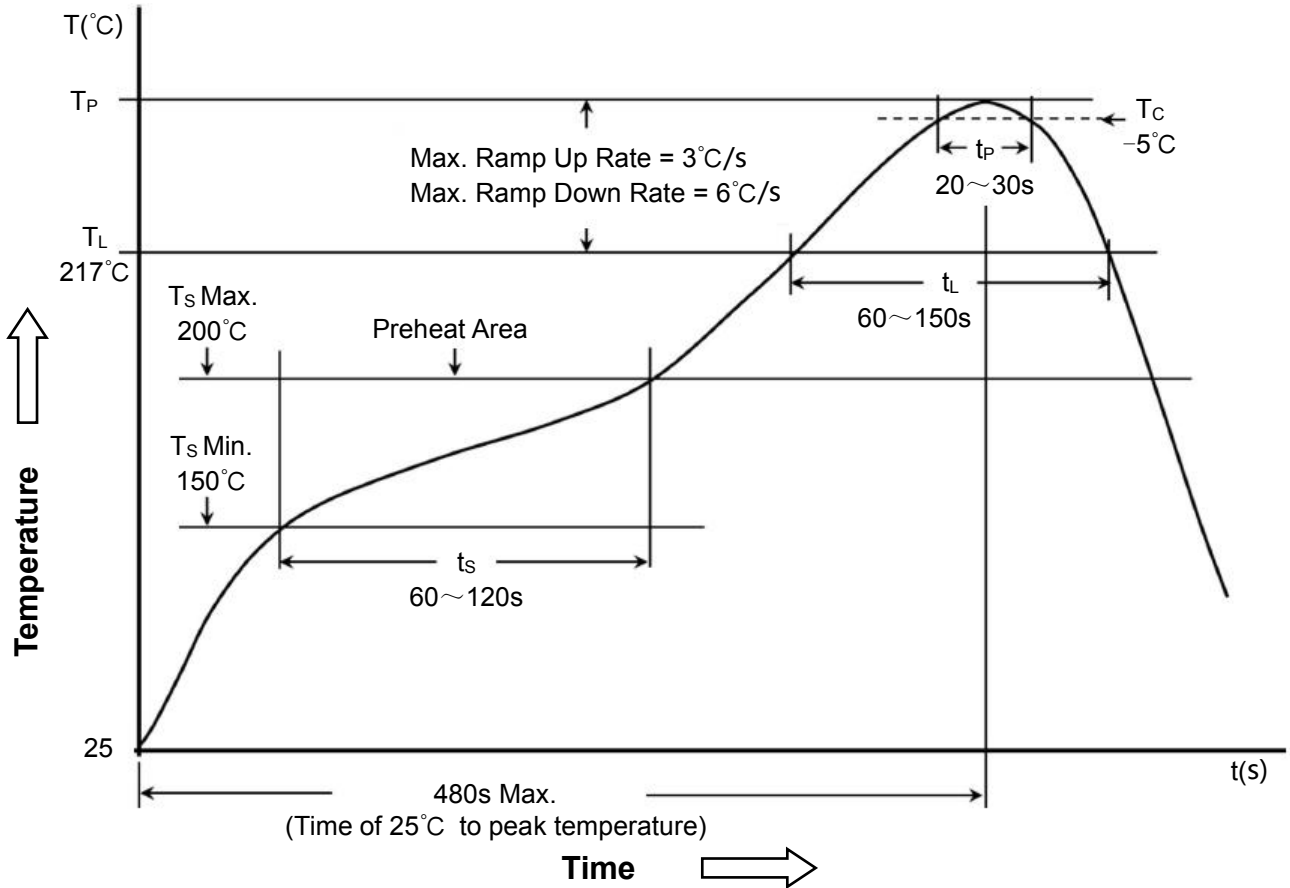
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

**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 <sup>3</sup>	350~2000 mm <sup>3</sup>	>2000 mm <sup>3</sup>
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。