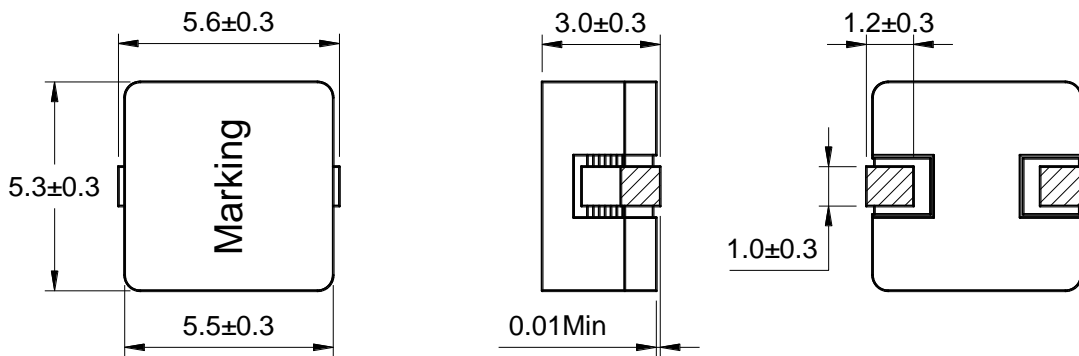


**Outline:  
产品概要**

- Magnetic shielded structure: excellent resistance to electromagnetic interference(EMI)  
磁屏蔽结构：抗电磁干扰(EMI)性能强
- Flat wire winding, achieve a low D.C. Resistance.  
扁平线绕组，实现极低的直流电阻。
- Low loss, high efficiency, wide application frequency and application scope.  
低损耗，高效率，应用频率宽，适用范围广。
- Lightweight design, save space, suitable for high density SMT.  
轻薄型设计，节省空间，适合高密度贴装。
- 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)

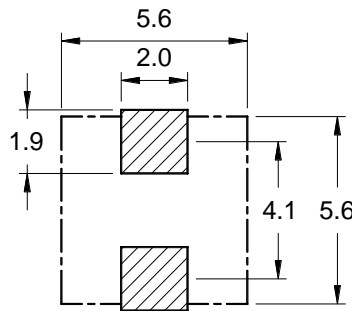
**1 Appearance and dimensions (mm)  
外形尺寸**



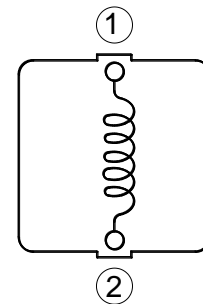
**2 Marking  
印字标识**



**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		
CSB0530-R32M	0.32	2.45	2.70	19.0	18.0
CSB0530-R47M	0.47	3.90	4.30	15.0	13.0
CSB0530-R68M	0.68	6.40	7.10	11.5	11.0
CSB0530-1R0M	1.00	11.5	12.6	10.5	7.50
CSB0530-1R5M	1.50	13.2	14.5	7.50	7.00

■ 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 30% of its initial value.

饱和电流: 电感值下降其初始值的 30% 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  $\Delta T50^{\circ}\text{C}$  ( $T_a=25^{\circ}\text{C}$ ).

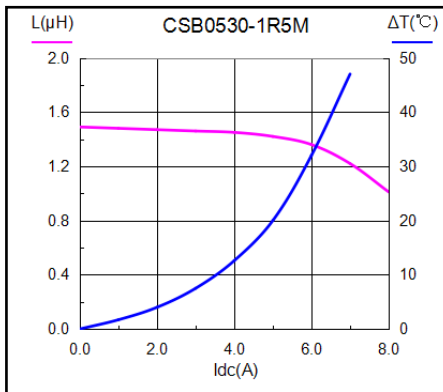
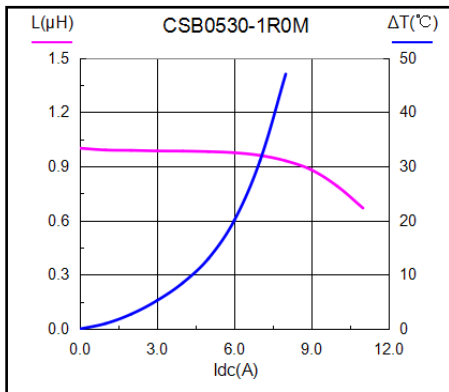
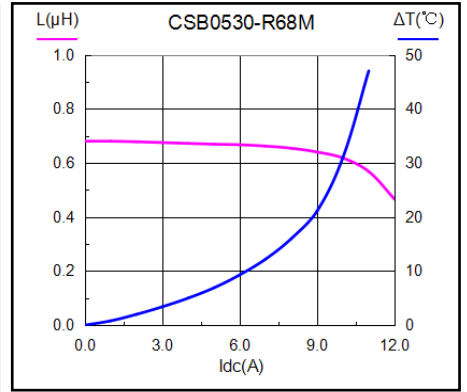
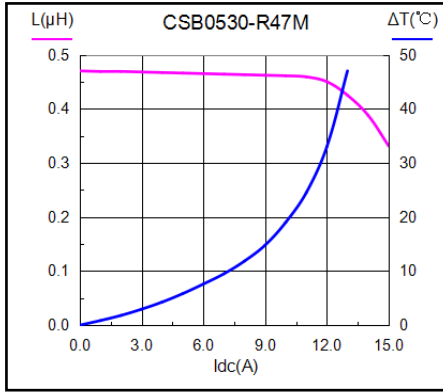
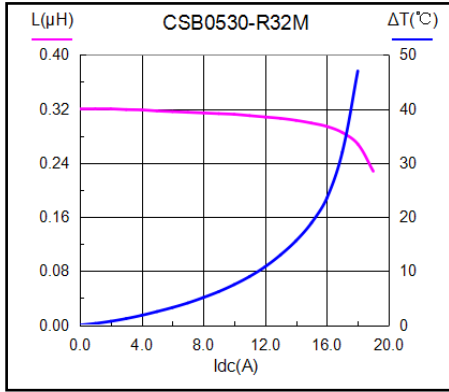
温升电流: 使产品温度上升到  $\Delta T50^{\circ}\text{C}$  时所加载的实际直流电流值 ( $T_a=25^{\circ}\text{C}$ )。

※ 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

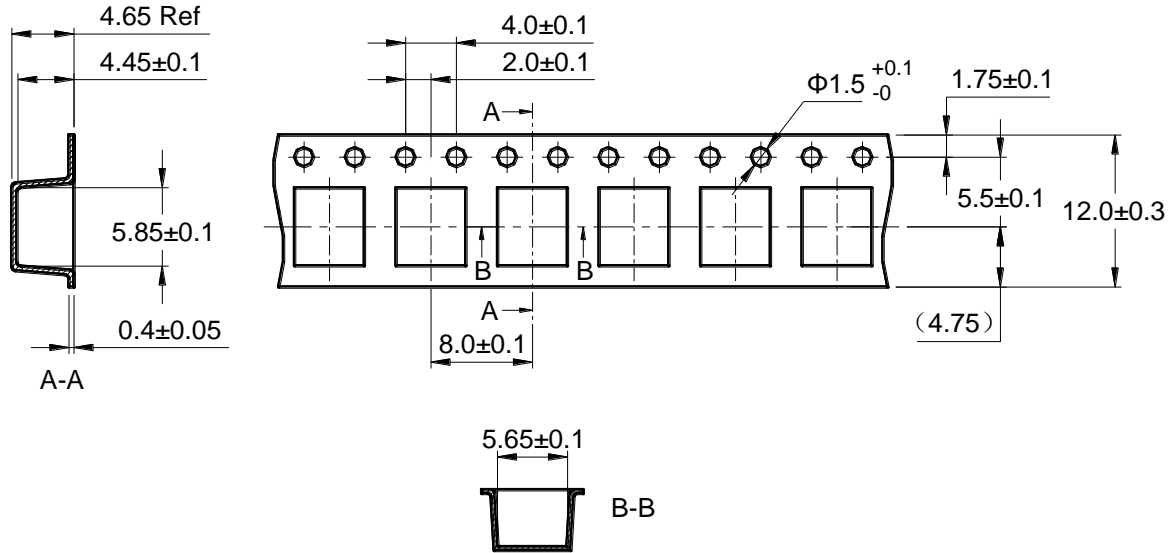


## 7 Packing specification

### 包装规格

#### 7.1 Carrier tape dimensions (mm)

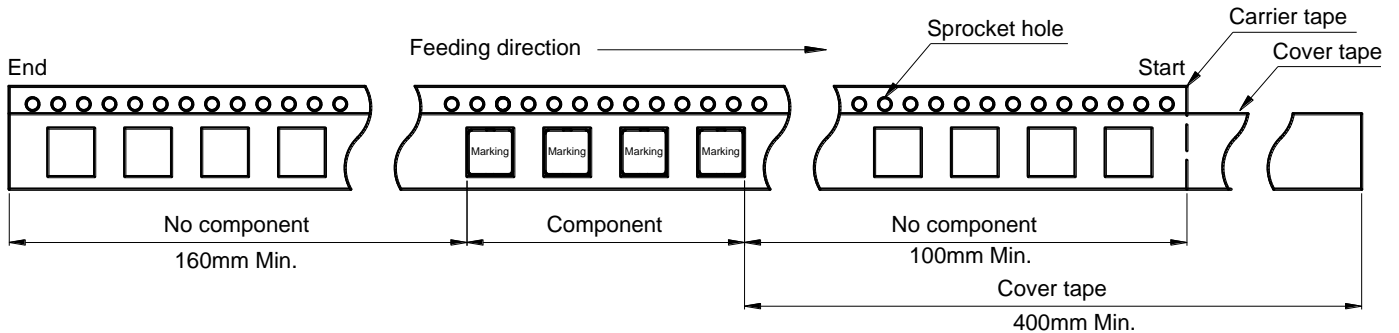
载带尺寸



※ 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

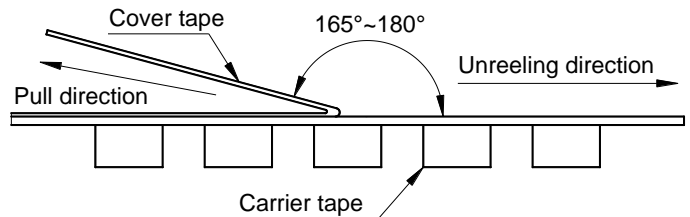
捆包方向



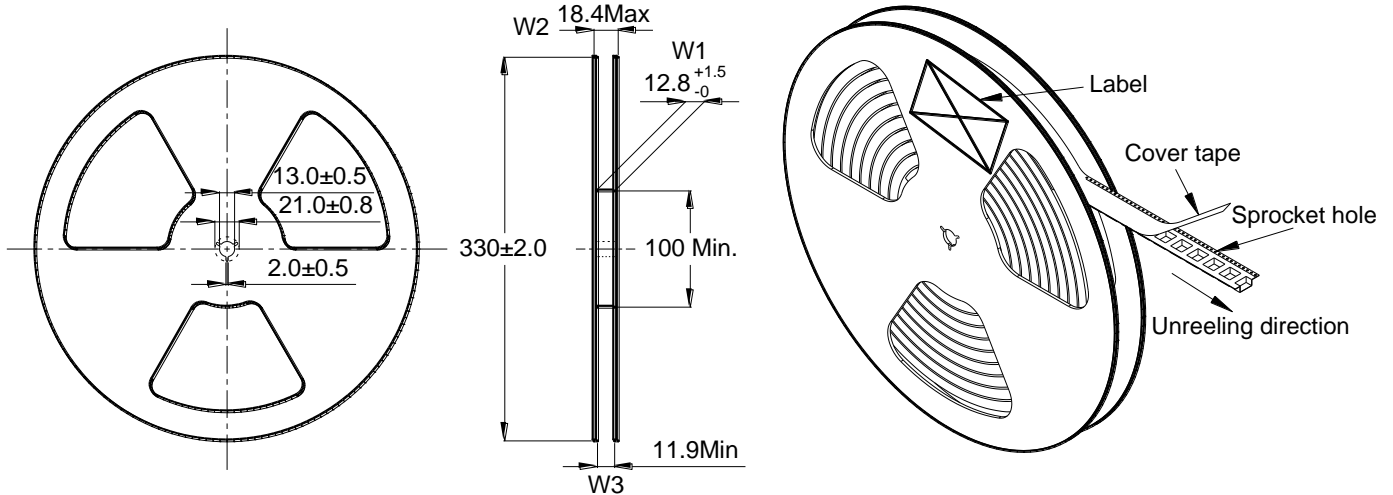
#### 7.3 Cover tape peel off condition

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: 340×340×95mm  
内包装盒
- Out Carton: 355×355×385mm  
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
CSB0530	2000pcs	8000pcs = (4×2000)	24000pcs = (3×8000)

### 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

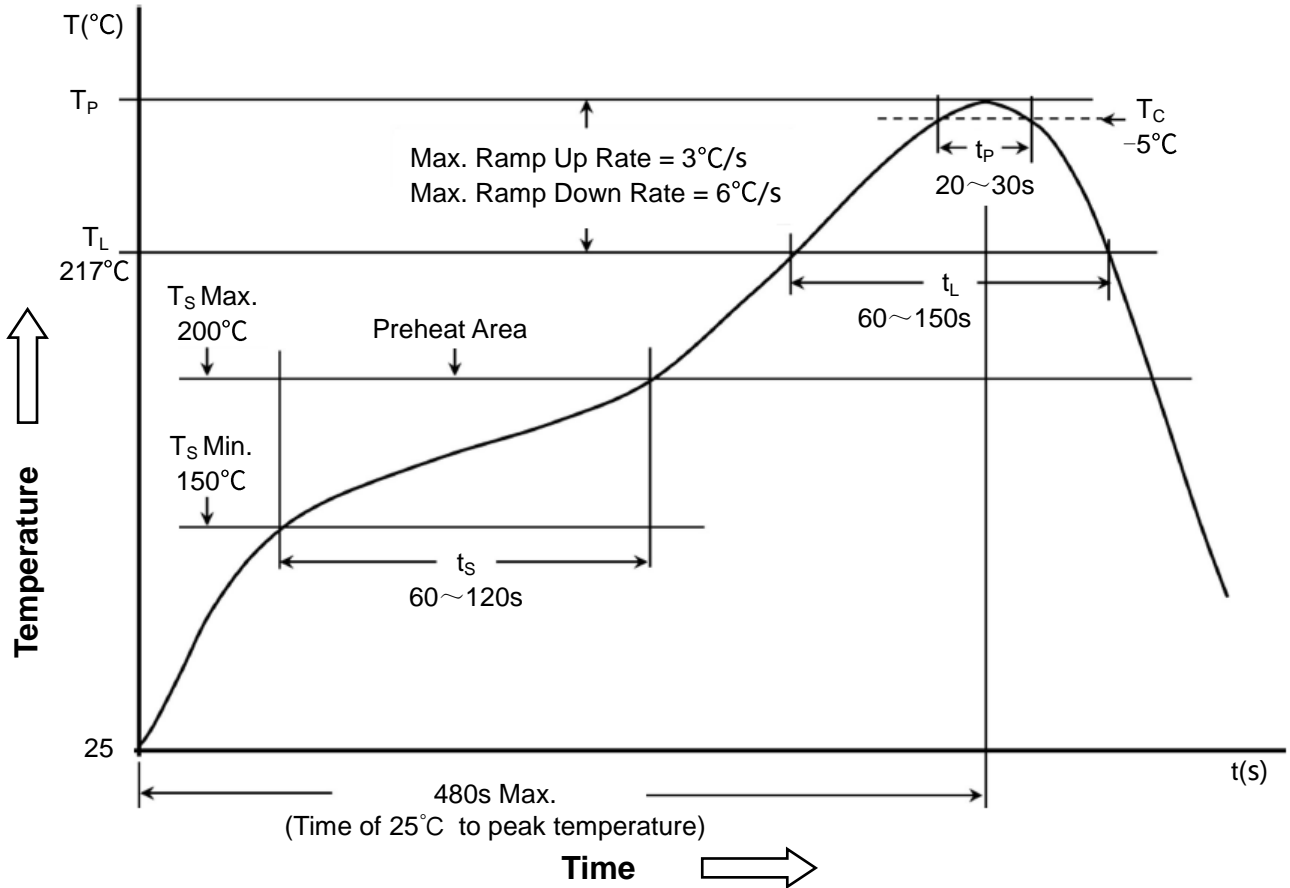
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

**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。