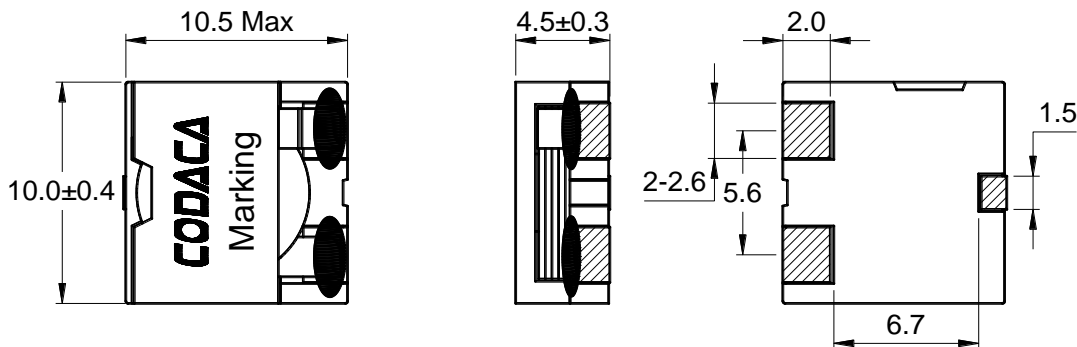


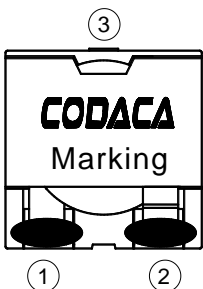
### Outline: 产品概要

- Magnetic shielding structure, excellent resistance to electro magnetic interference.  
磁屏蔽结构, 抗电磁干扰(EMI)性能强。
- Assemblage design, sturdy structure.  
组立式设计, 结构坚固。
- Small volume, high current, low magnetic loss, low ESR, small parasitic capacitance.  
小体积, 大电流, 低磁损, 低阻抗, 寄生电容小。
- Temperature rise current and saturation current is less influenced by environment.  
温升电流及饱和电流受环境条件影响小。
- 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)

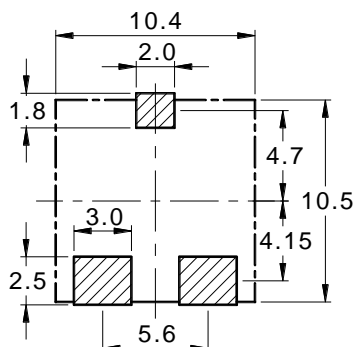
### 1 Appearance and dimensions (mm) 外形尺寸



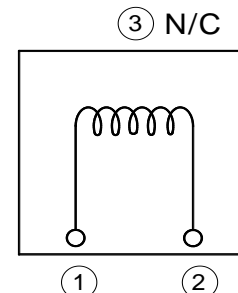
### 2 Marking 印字标识



### 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 ( $\mu\text{H}$ ) 电感值 ※1 $\pm 20\%$	D.C.R. ( $\text{m}\Omega$ ) 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		
CSCI1045-R22M	0.22	1.60	2.20	39.6	18.0
CSCI1045-2R2M	2.20	6.90	8.00	11.0	9.00
CSCI1045-2R5M	2.50	6.90	8.00	8.00	9.00

■ 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 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.

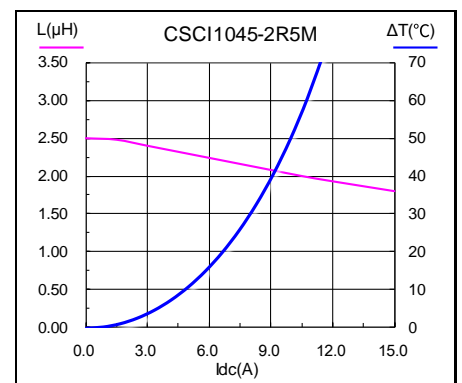
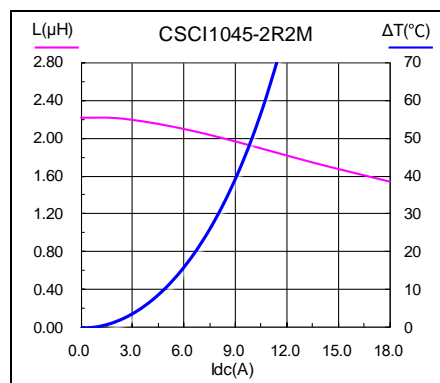
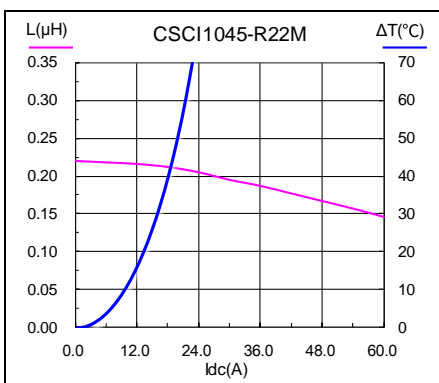
all will affect the product temperature. Please verify the product temperature in the final application.

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

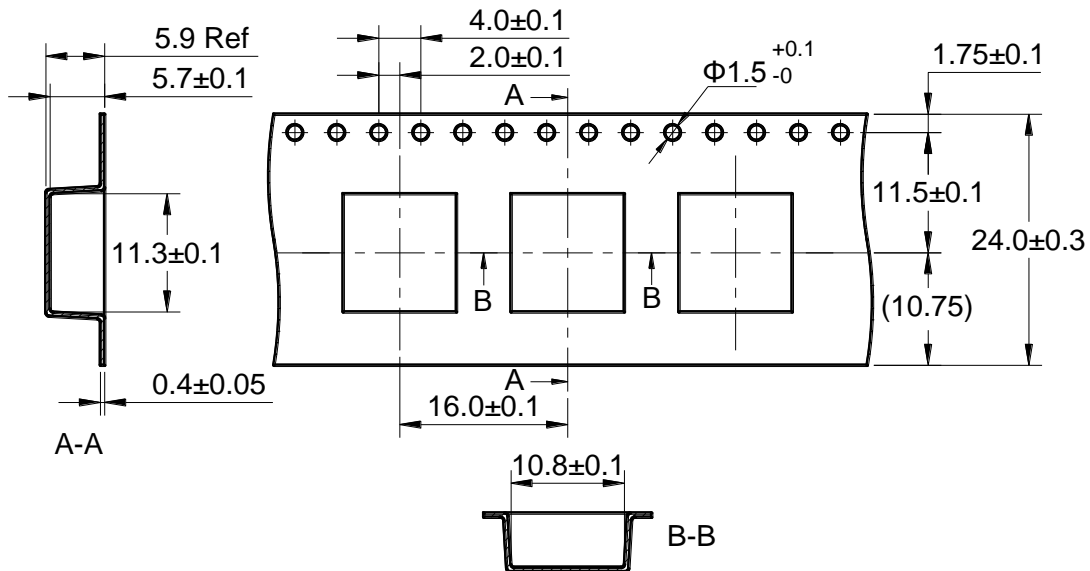


## 7 Packing specification

### 包装规格

#### 7.1 Carrier tape dimensions (mm)

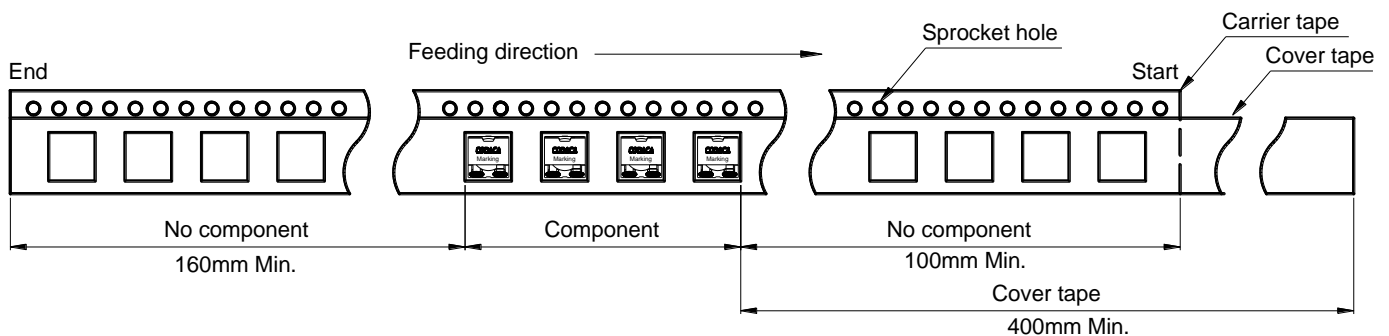
#### 载带尺寸



※ 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

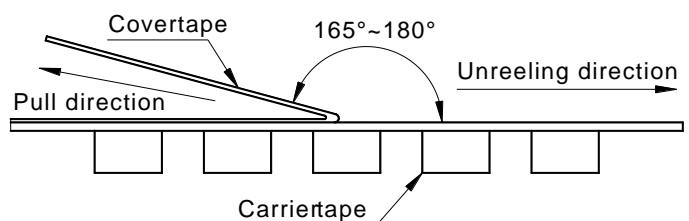
#### 捆包方向



#### 7.3 Cover tape peel off condition

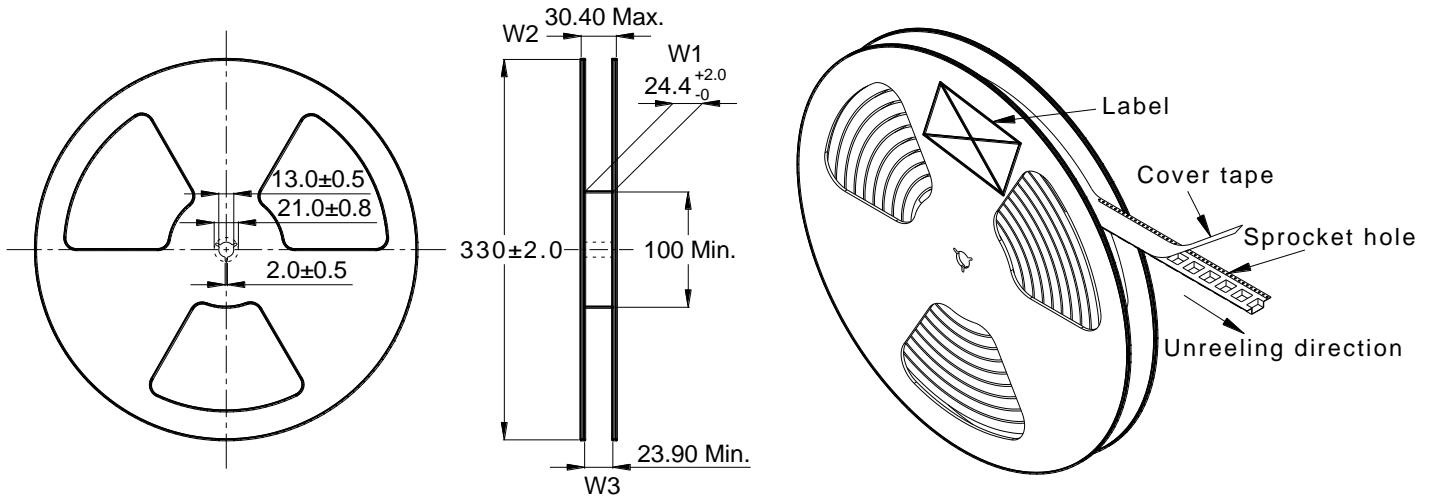
#### 盖带剥离条件

- 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 and packing quantity

包装箱尺寸和包装数量

■ 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 包装总数量
CSCI1045	700pcs	(700×2) = 1400pcs	(1400×3) = 4200pcs

## 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

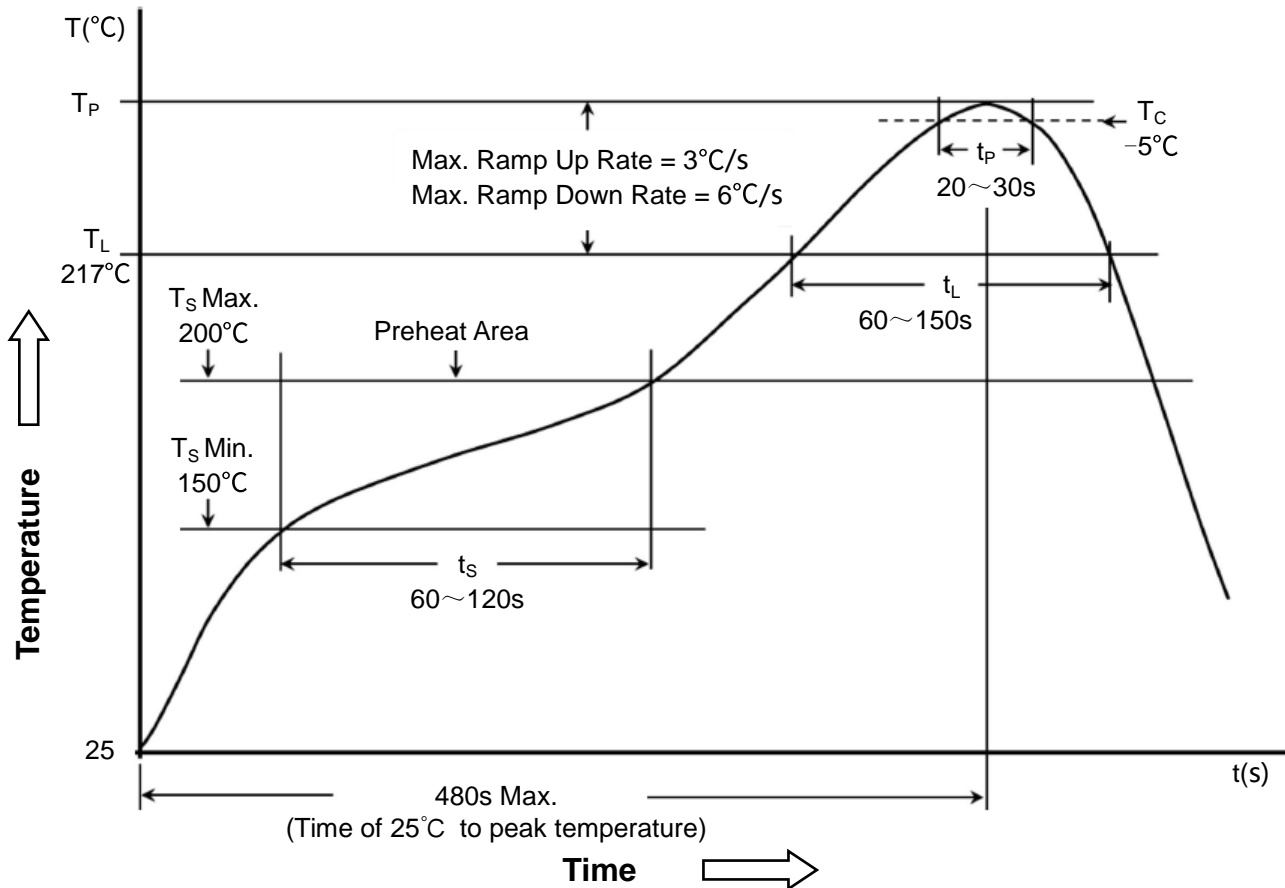
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

## 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<sub>P</sub>)

封装体峰值温度(T<sub>P</sub>)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.