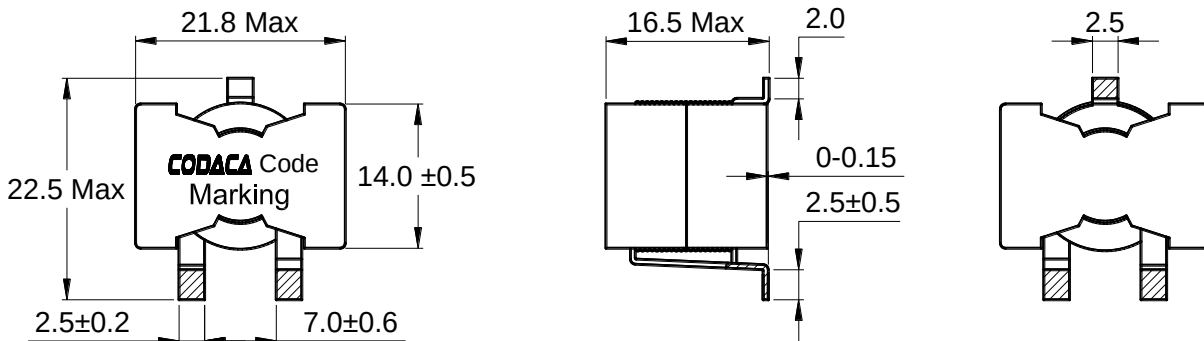




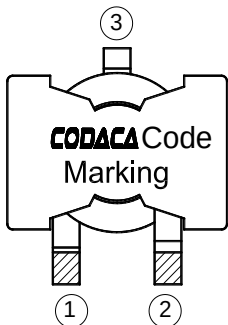
## Outline: 产品概要

- Assemblage design, sturdy structure.  
组立式设计，结构坚固。
- High inductance, high current, low magnetic loss, low ESR, small parasitic capacitance.  
高电感值，大电流，低磁损，低阻抗，寄生电容小。
- Flat wire winding, achieve a low D.C. Resistance.  
扁平线绕组，实现极低的直流电阻。
- 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)

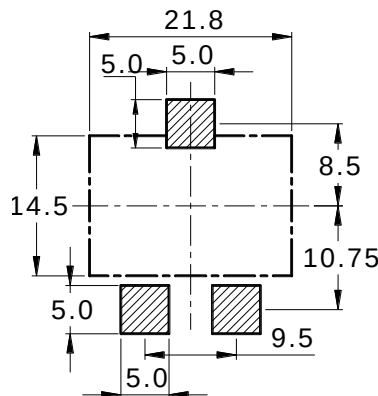
## 1 Appearance and dimensions (mm) 外形尺寸



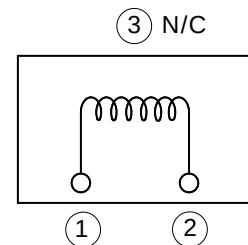
## 2 Marking 印字标识



## 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.<br>型号 | Inductance (μH)<br>电感值 ※1<br>±20% | D.C.R. (mΩ)<br>直流电阻 |      | Saturation<br>current (A)<br>饱和电流 ※2<br>Typical | Temperature rise<br>current (A)<br>温升电流 ※3<br>Typical |
|----------------|-----------------------------------|---------------------|------|-------------------------------------------------|-------------------------------------------------------|
|                |                                   | Typical             | Max  |                                                 |                                                       |
| CSCF2016-4R7MC | 4.70                              | 3.30                | 4.00 | 42.0                                            | 21.0                                                  |
| CSCF2016-6R8MC | 6.80                              | 3.57                | 4.30 | 25.0                                            | 20.0                                                  |
| CSCF2016-8R2MC | 8.20                              | 3.57                | 4.30 | 25.0                                            | 20.0                                                  |
| CSCF2016-100MC | 10.0                              | 5.28                | 6.30 | 24.0                                            | 16.0                                                  |
| CSCF2016-220MC | 22.0                              | 5.28                | 6.30 | 10.0                                            | 16.0                                                  |
| CSCF2016-330MC | 33.0                              | 13.0                | 15.0 | 9.00                                            | 12.0                                                  |
| CSCF2016-470MC | 47.0                              | 13.0                | 15.0 | 6.50                                            | 12.0                                                  |

■ 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。

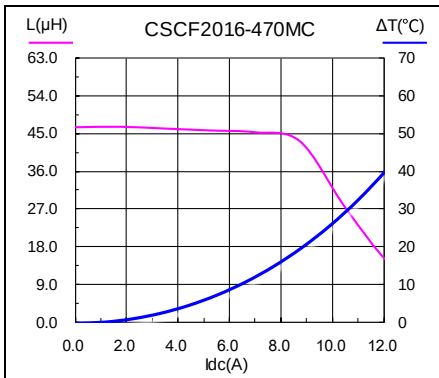
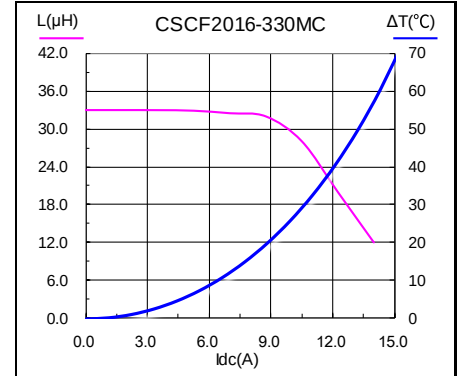
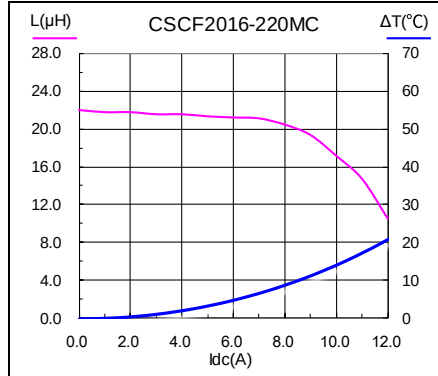
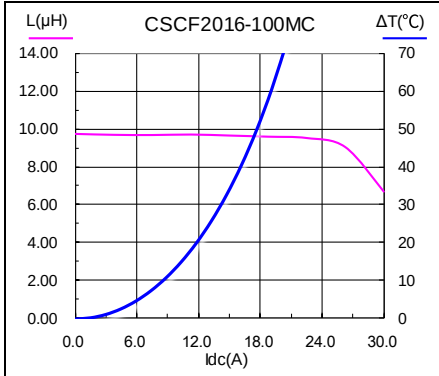
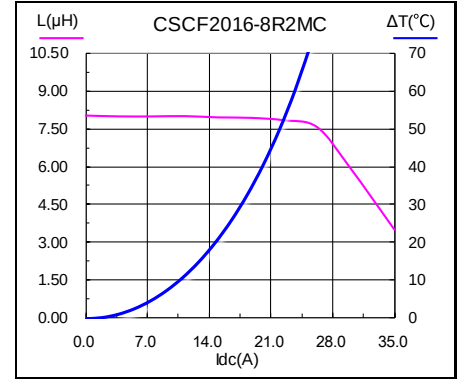
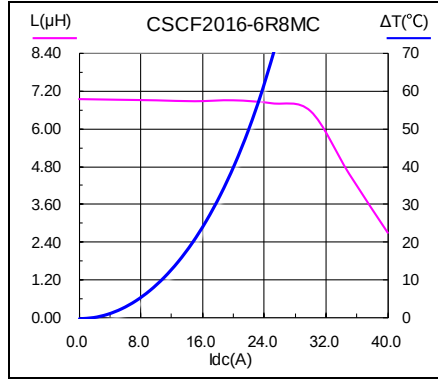
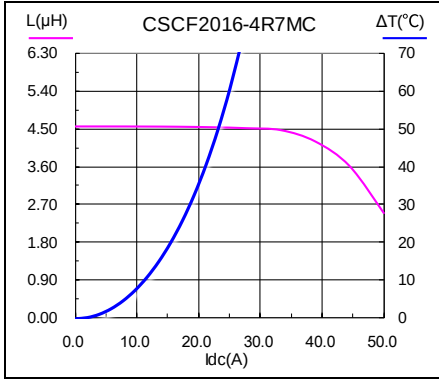
※1 Inductance measure condition at 100kHz, 0.1V.  
电感测试条件为 100kHz, 0.1V。

※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

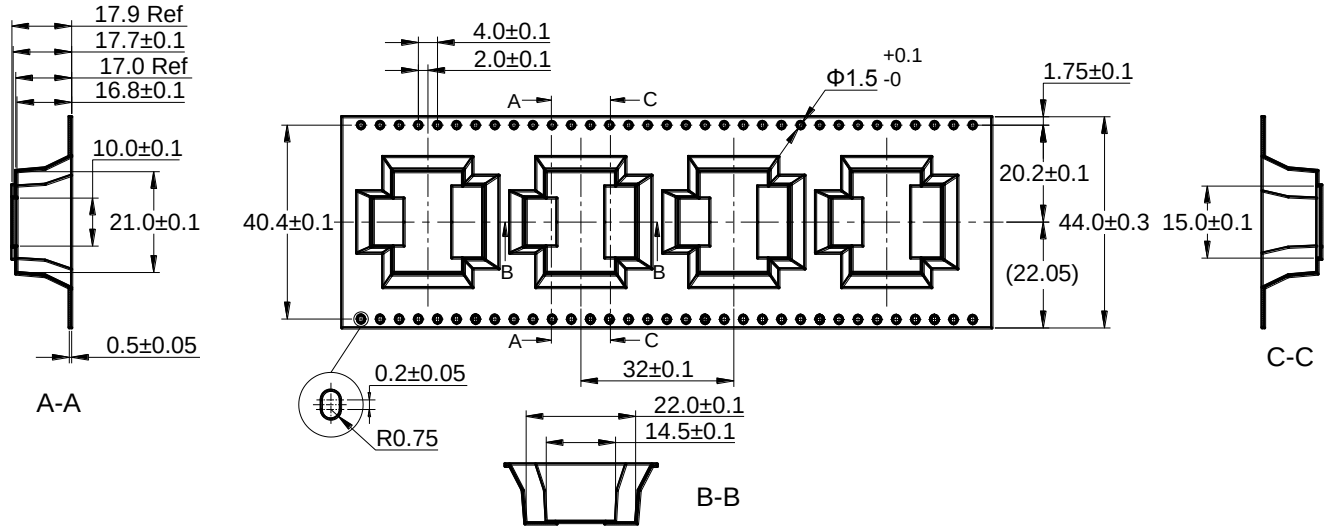


## 7 Packing specification

### 包装规格

#### 7.1 Carrier tape dimensions (mm)

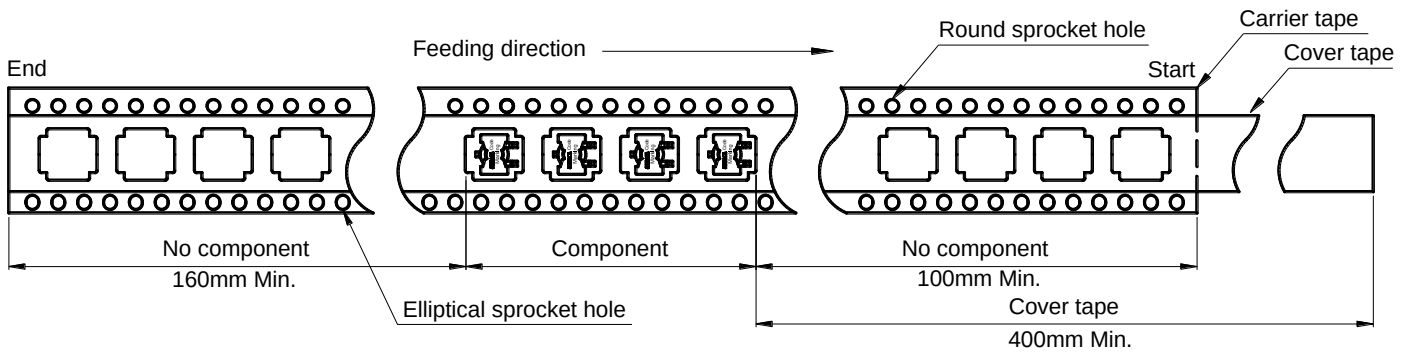
##### 载带尺寸



※ 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

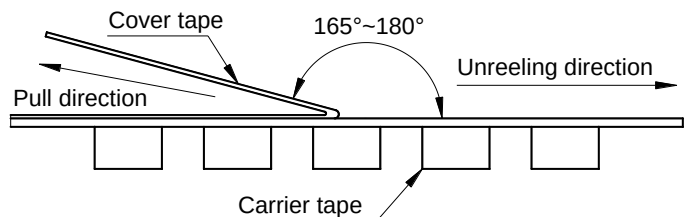
##### 捆包方向



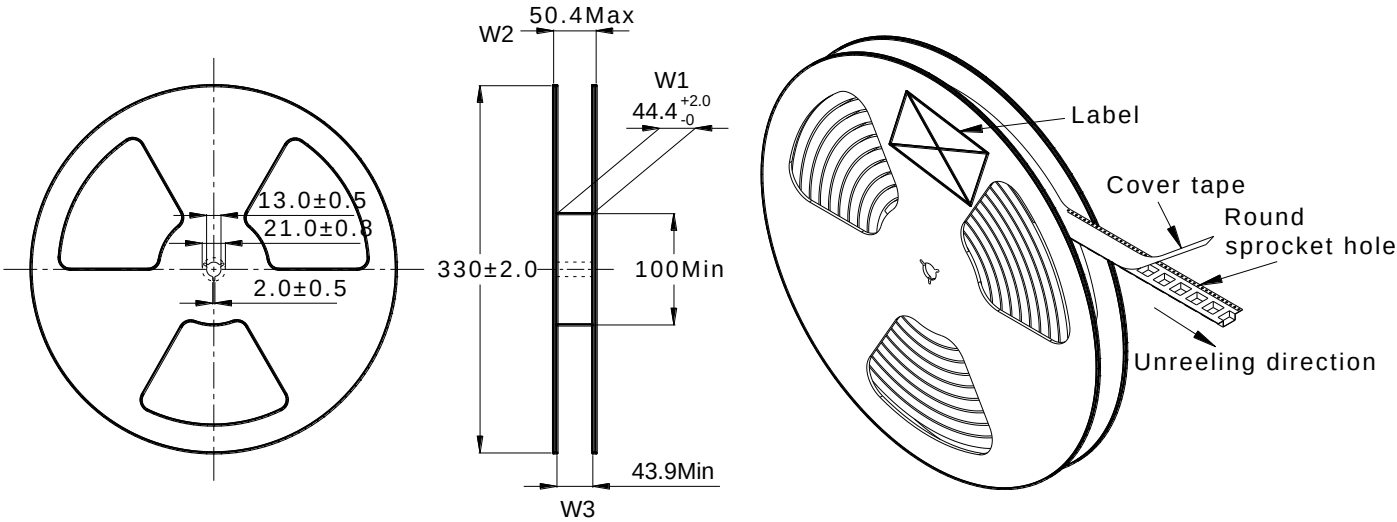
#### 7.3 Cover tape peel off condition

##### 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 and packing quantity  
包装箱尺寸和包装数量

- Inner Carton: 340×340×135mm  
内包装盒
- Out Carton : 360×360×295mm  
外包装箱

| Product Series<br>产品系列 | Quantity / Reel<br>数量 / 卷 | Inner Carton Quantity<br>内盒 包装数量 | Out Carton Quantity<br>外箱 包装总数量 |
|------------------------|---------------------------|----------------------------------|---------------------------------|
| CSCF2016               | 100pcs                    | (100×2) = 200pcs                 | (200×2) = 400pcs                |

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

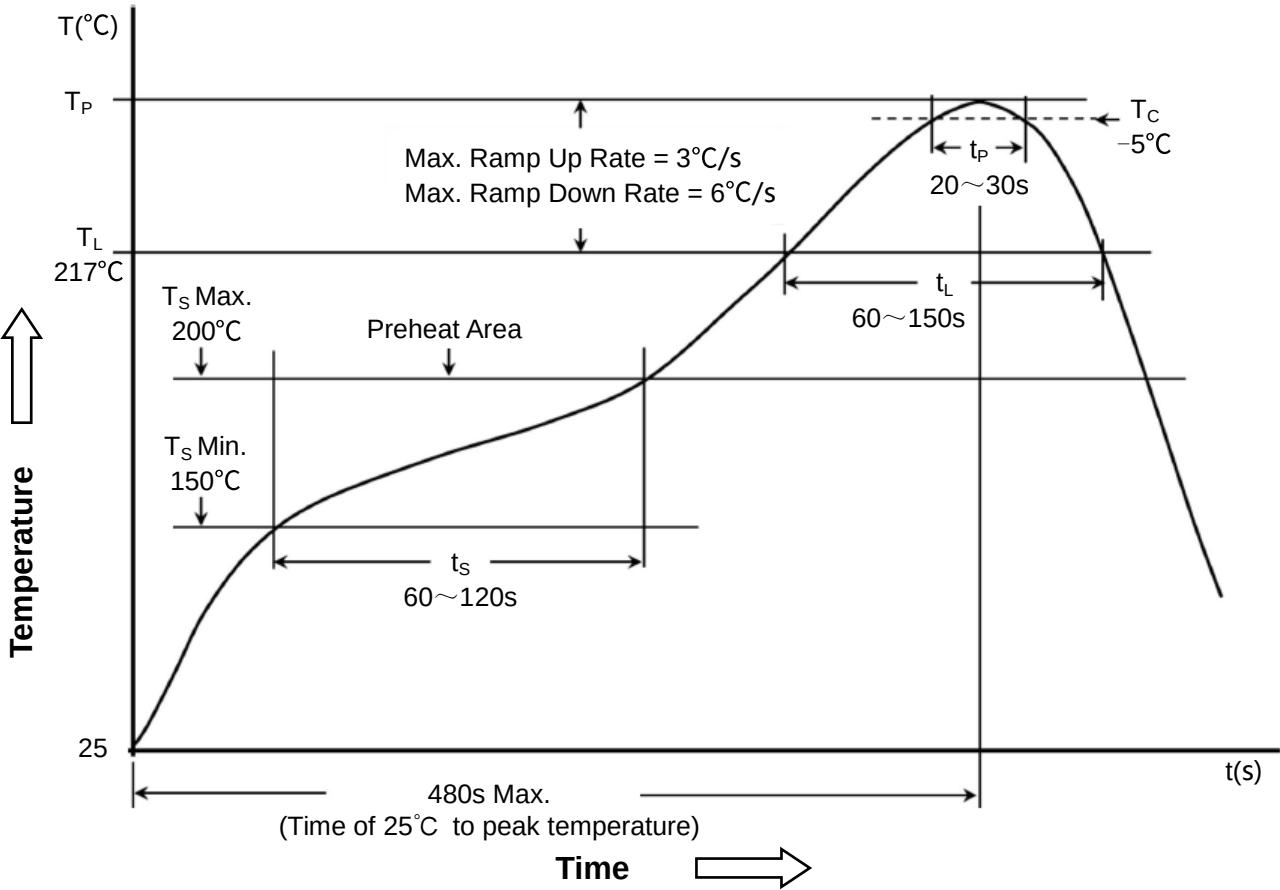
- Customer Name  
客户名称
- Customer Part No.  
客户型号
- Supplier Part No.  
供应商型号
- Supplier Name  
供应商名称
- Country of origin  
产品产地

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<br>封装厚度 | Package Volume<br>封装体积 |                          |                       |
|--------------------------|---------------------------|------------------------|--------------------------|-----------------------|
|                          |                           | <350 mm <sup>3</sup>   | 350~2000 mm <sup>3</sup> | >2000 mm <sup>3</sup> |
| PB-Free Assembly<br>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。