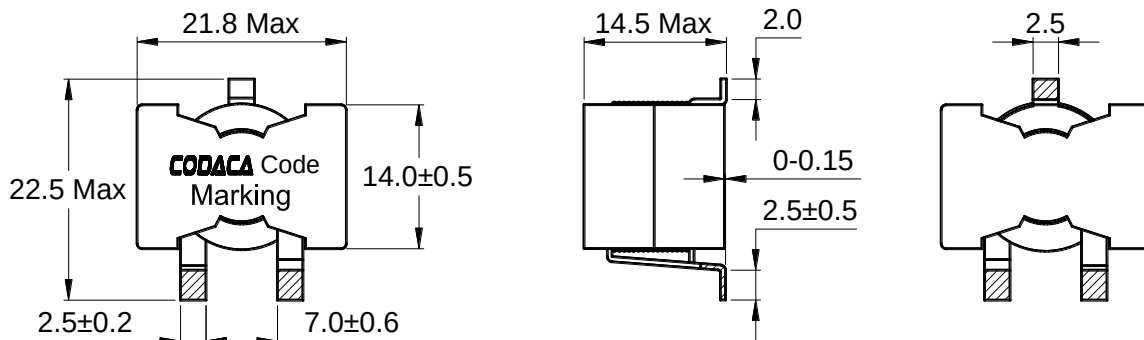




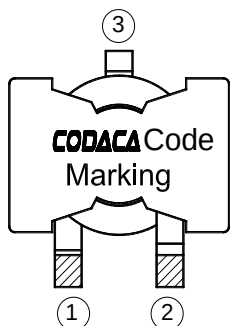
Outline: 产品概要

- 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)

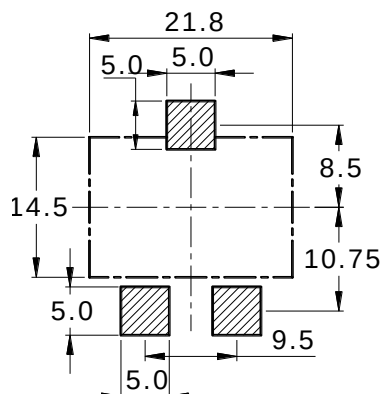
1 Appearance and dimensions (mm) 外形尺寸



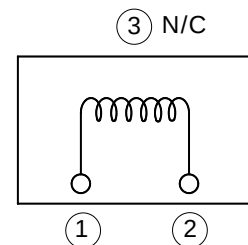
2 Marking 印字标识



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. 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		
CSCF2014-2R2MC	2.20	1.70	2.20	55.0	28.0
CSCF2014-2R7MC	2.70	1.70	2.20	48.0	28.0
CSCF2014-3R3MC	3.30	3.28	3.80	48.0	24.0
CSCF2014-4R7MC	4.70	3.28	3.80	35.0	24.0
CSCF2014-5R6MC	5.60	3.28	3.80	30.0	24.0
CSCF2014-6R8MC	6.80	6.60	7.30	34.0	18.0
CSCF2014-8R2MC	8.20	6.60	7.30	29.0	18.0
CSCF2014-100MC	10.0	6.60	7.30	23.0	18.0
CSCF2014-150MC	15.0	8.60	9.50	18.0	16.0
CSCF2014-220MC	22.0	8.60	9.50	13.0	16.0
CSCF2014-330MC	33.0	8.60	9.50	9.00	16.0

■ 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。

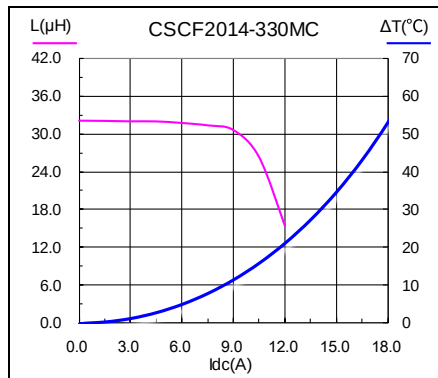
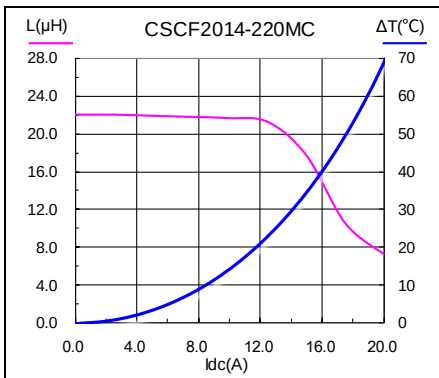
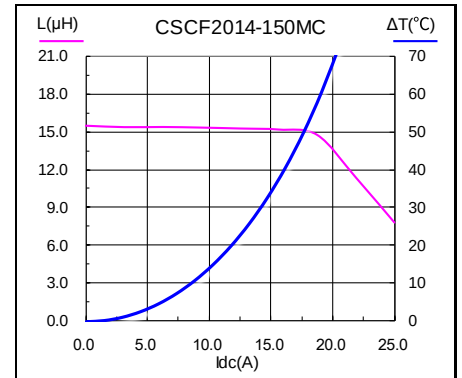
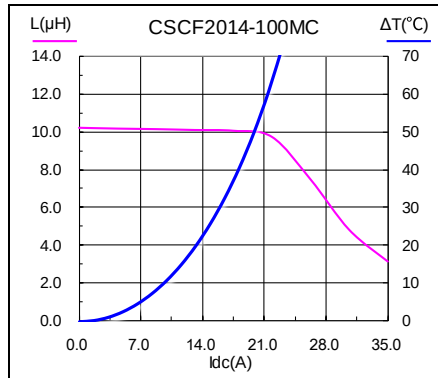
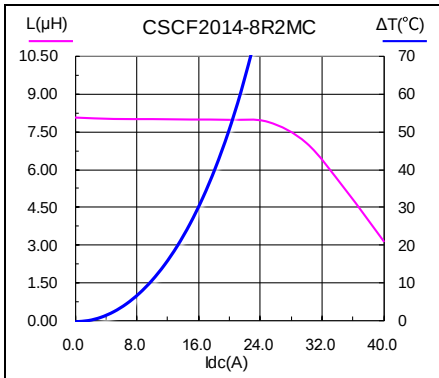
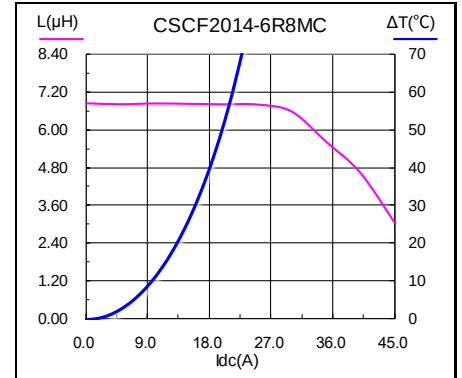
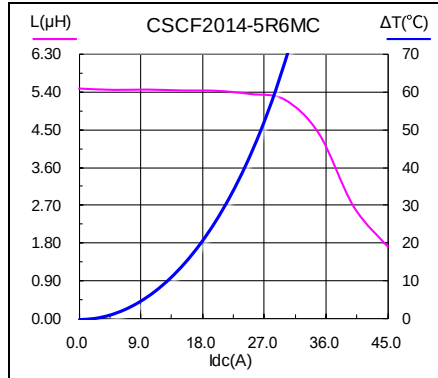
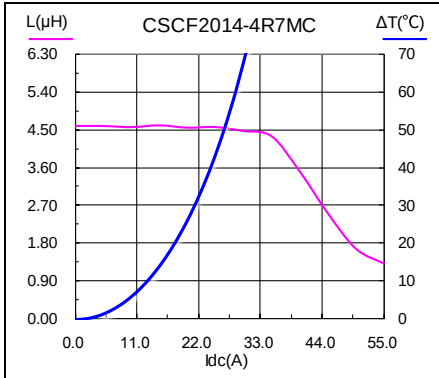
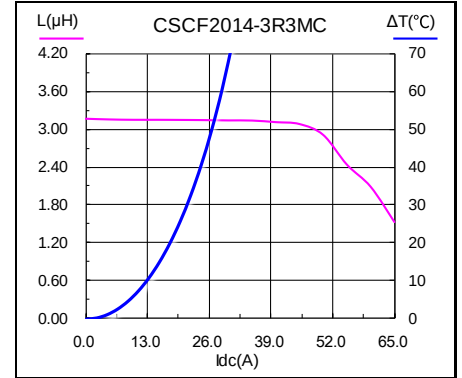
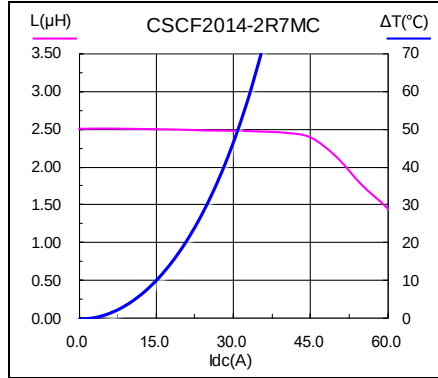
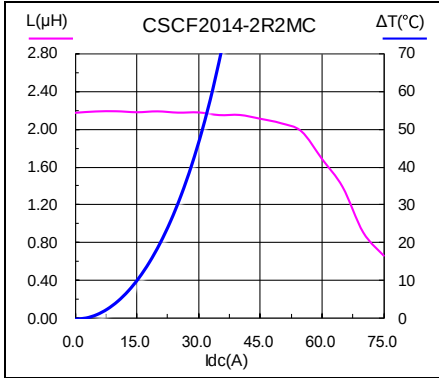
※1 Inductance measure condition at 100kHz, 0.1V.
电感测试条件为 100kHz, 0.1V。

※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 $\Delta T40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).
温升电流: 使产品温度上升到 $\Delta T40^{\circ}\text{C}$ 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



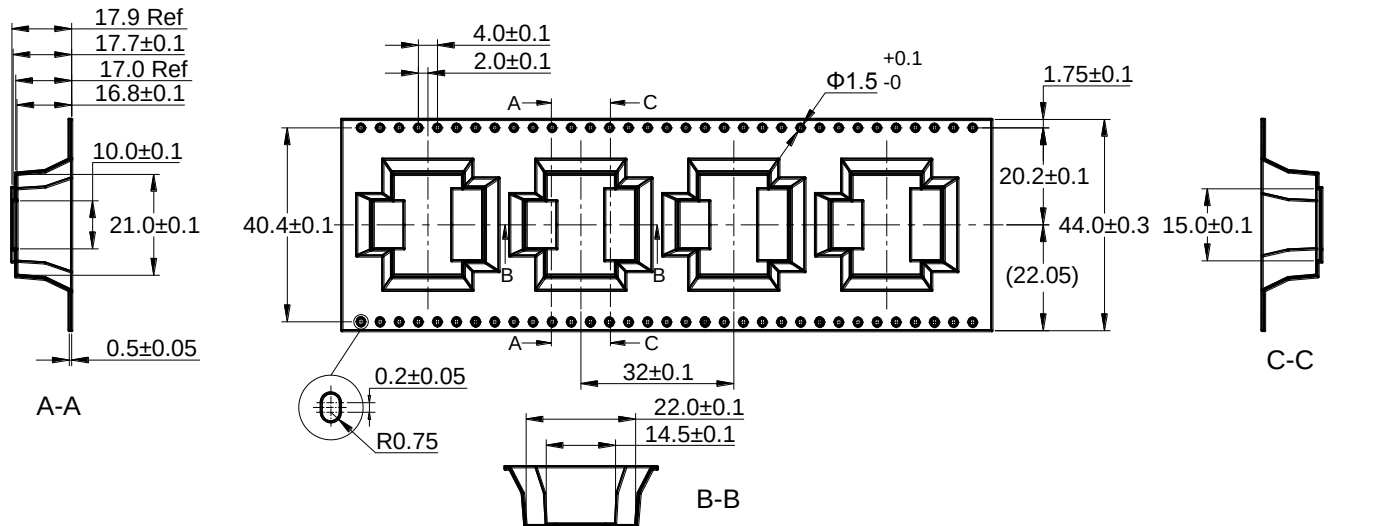
High Current Power Inductor - CSCF2014 Series

7 Packing specification

包装规格

7.1 Carrier tape dimensions (mm)

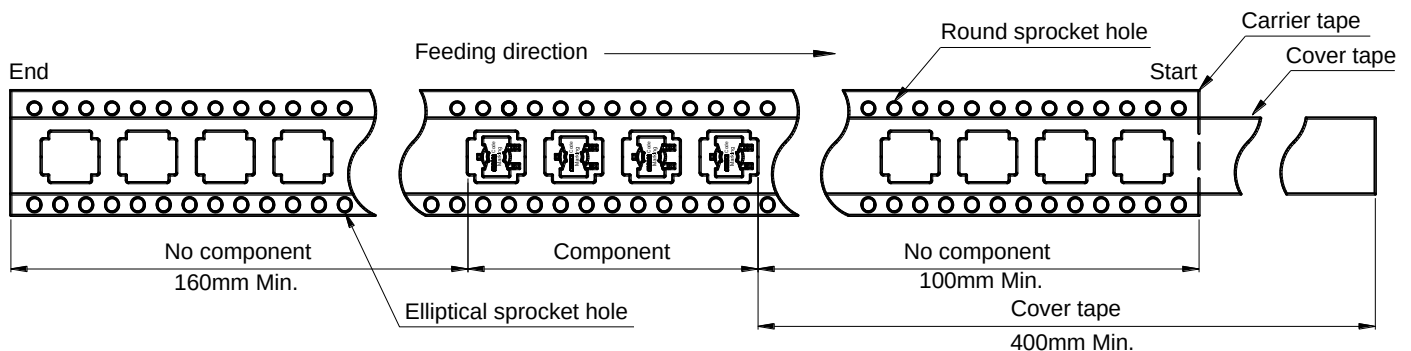
載帶尺寸



※ 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

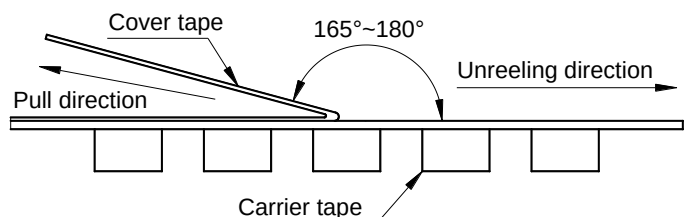
捆包方向



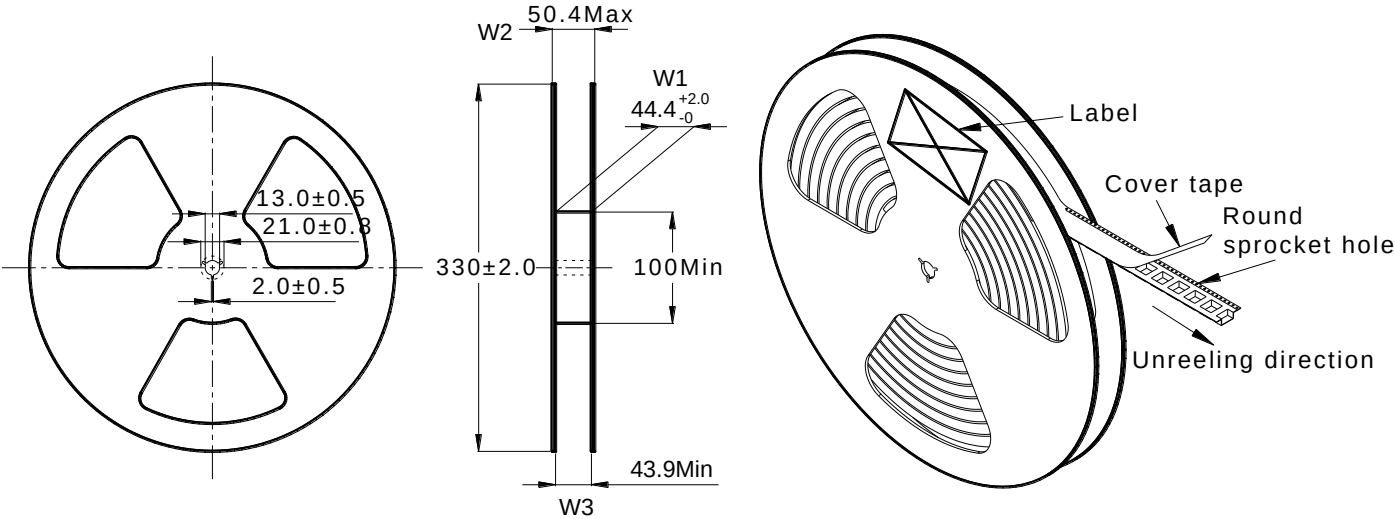
7.3 Cover tape peel off condition

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 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
CSCF2014	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

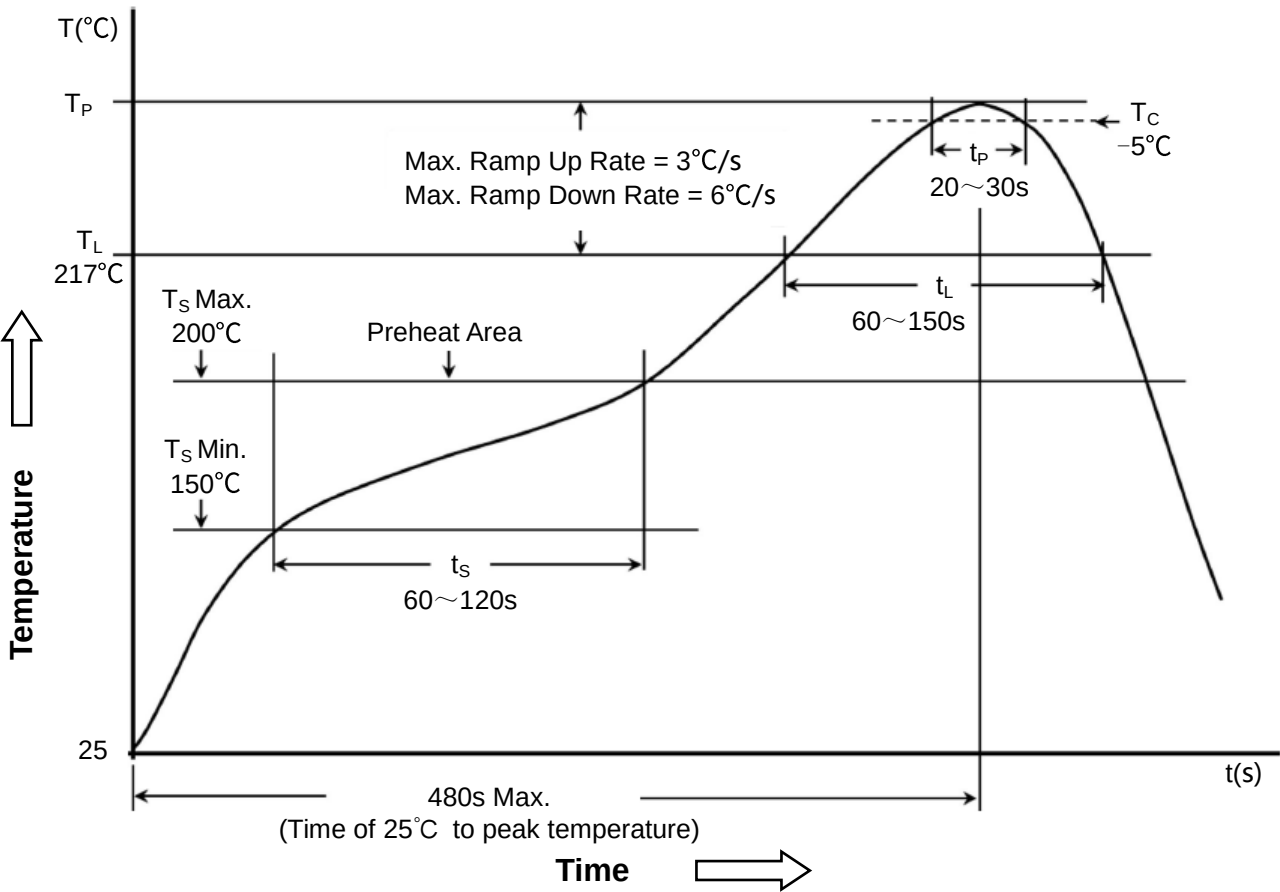
- Customer Name
客户名称
- Customer Part No.
客户型号
- Supplier Part No.
供应商型号
- Supplier Name
供应商名称
- Country of origin
产品产地

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_P)

封装体峰值温度(T_P)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。