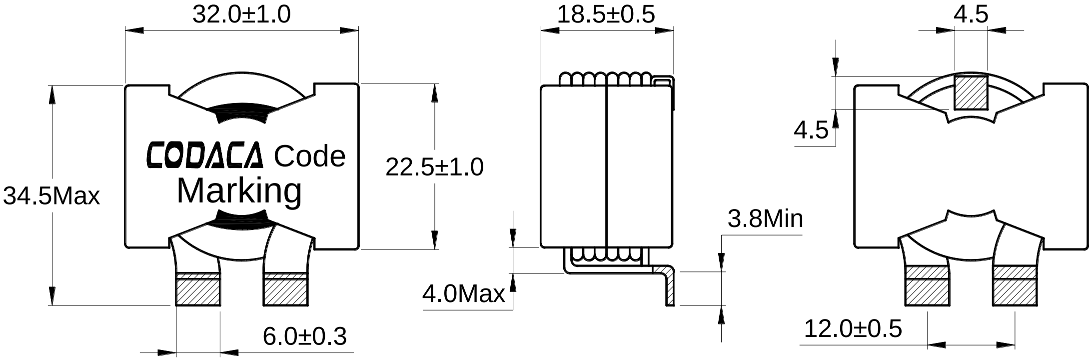
High Current Power Inductor
- CSCF3218 Series

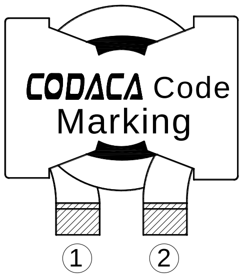
Outline:
产品概要

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

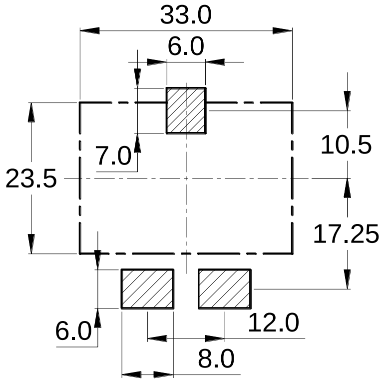
1 Appearance and dimensions (mm)
外形尺寸



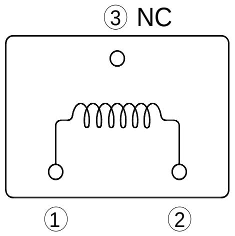
2 Marking
印字标识



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	D.C.R. (mΩ) 直流电阻		Saturation current (A) 饱和电流 ※2	Temperature rise current (A) 温升电流 ※3
	±20%	Typical	Max	Typical	Typical
CSCF3218-3R3MC	3.30	1.00	1.20	86.0	55.0
CSCF3218-170MC	17.0	3.50	4.20	35.0	30.0

■ All data is tested based on 25℃ ambient temperature.
所有数据基于环境温度 25℃条件下测试。

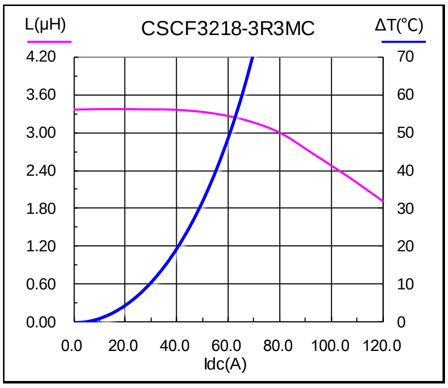
※1 Inductance measure condition at 100kHz, 0.1V.
电感测试条件为 100kHz, 0.1V。

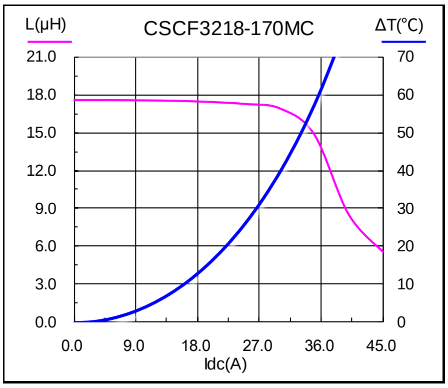
※2 Saturation current：the actual value of DC current when the inductance decrease 20% of its initial value.
饱和电流：电感值下降其初始值的 20%时所加载的实际直流电流值。

※3 Temperature rise current：the actual value of DC current when the temperature rise is ΔT40℃(Ta=25℃).
温升电流：使产品温度上升到 ΔT40℃时所加载的实际直流电流值(Ta=25℃)。

※ 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。

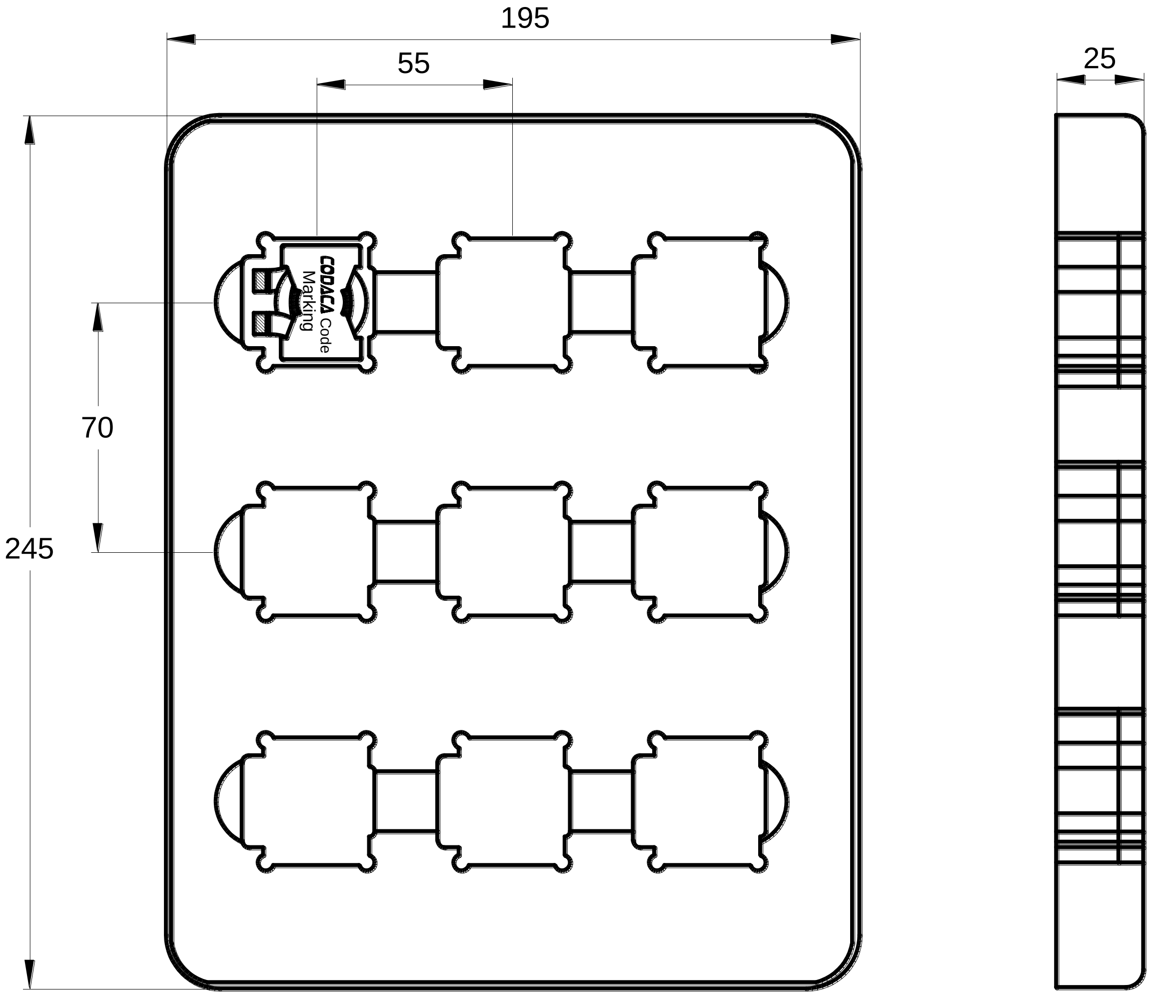
6 Saturation current VS temperature rise current curve
饱和电流 VS 温升电流曲线



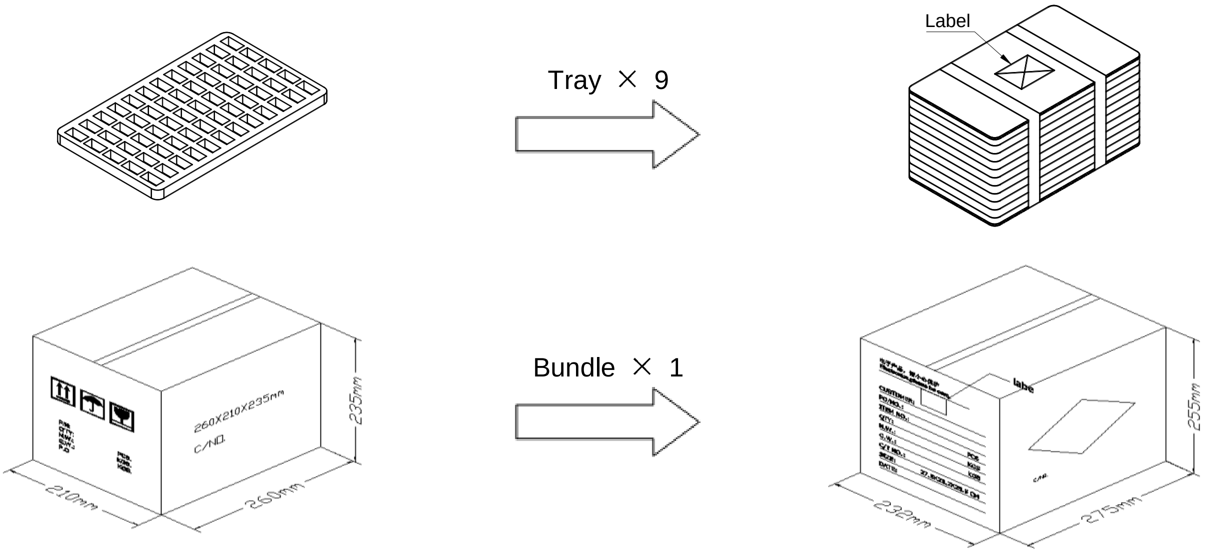


7 Packing specification
包装规格

7.1 Plastic tray dimensions (mm)
吸塑盘尺寸



7.2 Packing
包装



7.3 Carton dimensions and packing quantity
包装箱尺寸和包装数量

- ■ Inner Carton ： 260×210×235mm
  内包装箱
- ■ Out Carton ： 275×232×255mm
  外包装箱

Product Series 产品系列	Quantity / Tray 数量 / 盘	Quantity / Bundle 数量 / 捆	Out Carton Quantity 外箱 包装总数量
CSCF3218	9pcs	(9×9) = 81pcs	(81×1) = 81pcs

7.4 Label making
标签标识

The following items will be marked on the tray of product label and shipping label.
以下项目将明确标识于产品吸塑盘标签以及运输标签上。

Production Label
产品标签

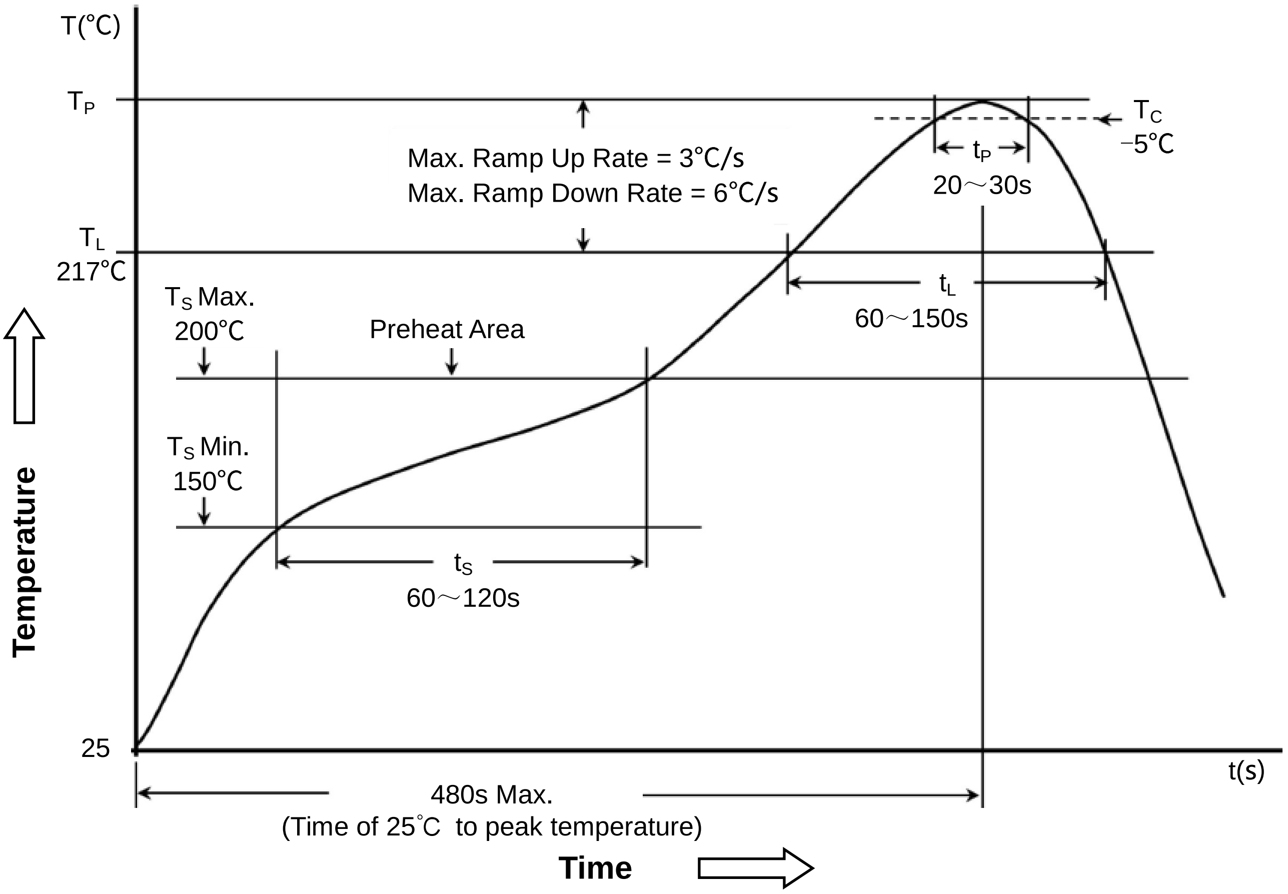
- ■ Part No.
  产品型号
- ■ Electrical Information
  产品电性信息
- ■ Quantity
  数　量
- ■ Packing No.
  包装流水号

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 mm³	350～2000 mm³	>2000 mm³
PB-Free Assembly 无铅装配	<1.6mm	260℃	260℃	260℃
	1.6～2.5mm	260℃	250℃	245℃
	≥2.5mm	250℃	245℃	245℃

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.
回流焊参照标准 IPC/JEDEC J-STD-020D。