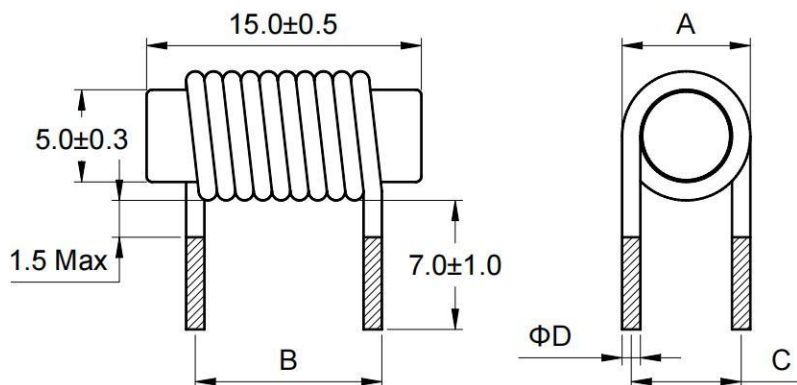




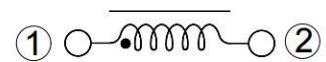
Outline: 产品概要

- Use ferrite core, high frequency.
铁氧体磁芯，工作频率高。
- Low DC resistance, high saturation current.
低直流电阻，高饱和电流。
- Lead free product, RoHS compliant.
无铅产品，符合 RoHS 指令。
- Widely used in switching power supply, power amplifier, output antenna, filter, display, UPS, and etc.
广泛应用于开关电源，功率放大器，输出天线，滤波器，显示器，不间断电源等。
- 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)

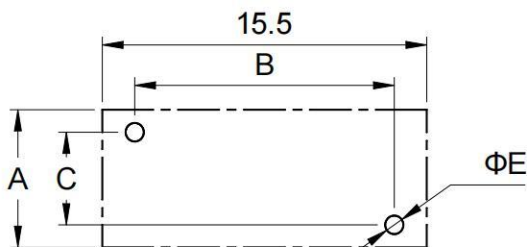
1 Appearance and dimensions (mm) 外形尺寸



2 Schematic 原理图



3 Reference hole pattern (mm) 参考焊孔尺寸



| Part No. 型号 | A | B | C | D | E |
|----------------|------|------|------|-------|------|
| | Max | ±1.0 | ±0.5 | ±0.15 | Ref. |
| 2R0 | 7.80 | 12.5 | 6.15 | 1.10 | 1.50 |
| 3R3 | 7.30 | 13.5 | 5.95 | 0.90 | 1.30 |
| 4R7 | 6.90 | 12.5 | 5.75 | 0.70 | 1.10 |
| 5R0 | 6.80 | 11.5 | 5.70 | 0.65 | 1.10 |
| 6R8 | 6.70 | 13.0 | 5.65 | 0.60 | 1.00 |
| 8R2 | 6.80 | 11.5 | 5.55 | 0.50 | 0.90 |
| 100 | 6.80 | 13.5 | 5.55 | 0.50 | 0.90 |



4 Electrical characteristics

电气特性

| Part No. 品名 | Inductance (μH) 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 | | |
| CAR0515-2R0M | 2.00 | 4.14 | 5.38 | 18.0 | 14.6 |
| CAR0515-3R3M | 3.30 | 7.60 | 9.90 | 15.0 | 10.8 |
| CAR0515-4R7M | 4.70 | 14.1 | 18.3 | 12.5 | 7.90 |
| CAR0515-5R0M | 5.00 | 15.2 | 19.8 | 10.2 | 7.60 |
| CAR0515-6R8M | 6.80 | 22.0 | 28.6 | 10.0 | 6.30 |
| CAR0515-8R2M | 8.20 | 33.0 | 43.0 | 9.50 | 5.20 |
| CAR0515-100M | 10.0 | 36.6 | 47.6 | 8.50 | 4.90 |

■ 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 1kHz, 0.25V.

电感测试条件为 1kHz, 0.25V。

※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 ($T_a = 25^\circ\text{C}$)。

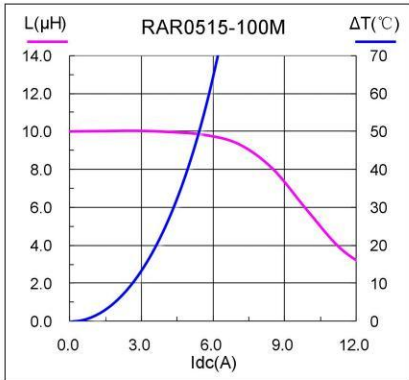
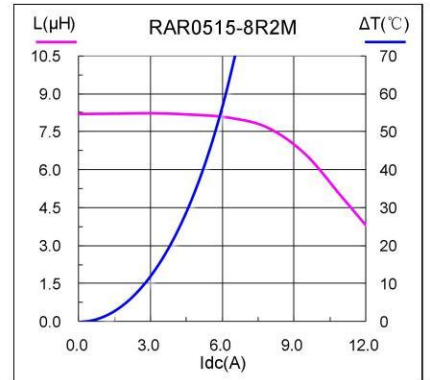
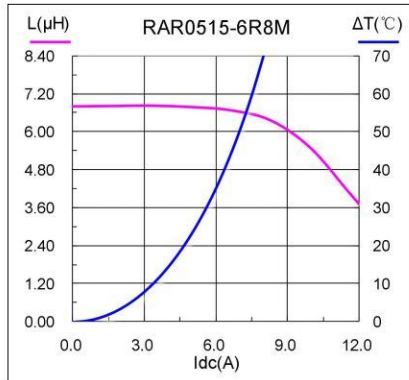
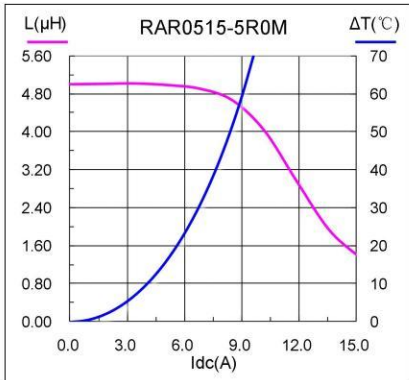
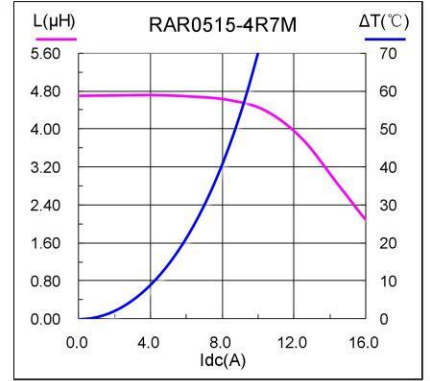
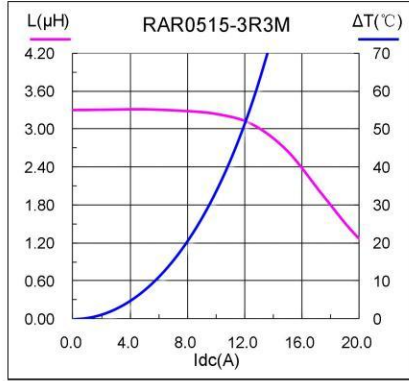
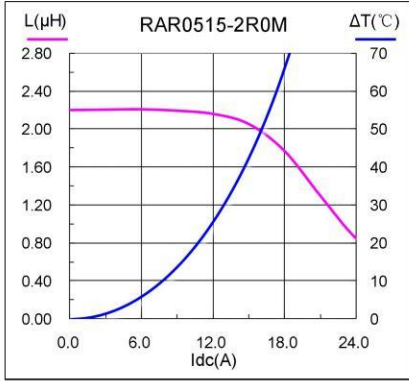
※ Special remind: Circuit design, component placement, PWB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

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。



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



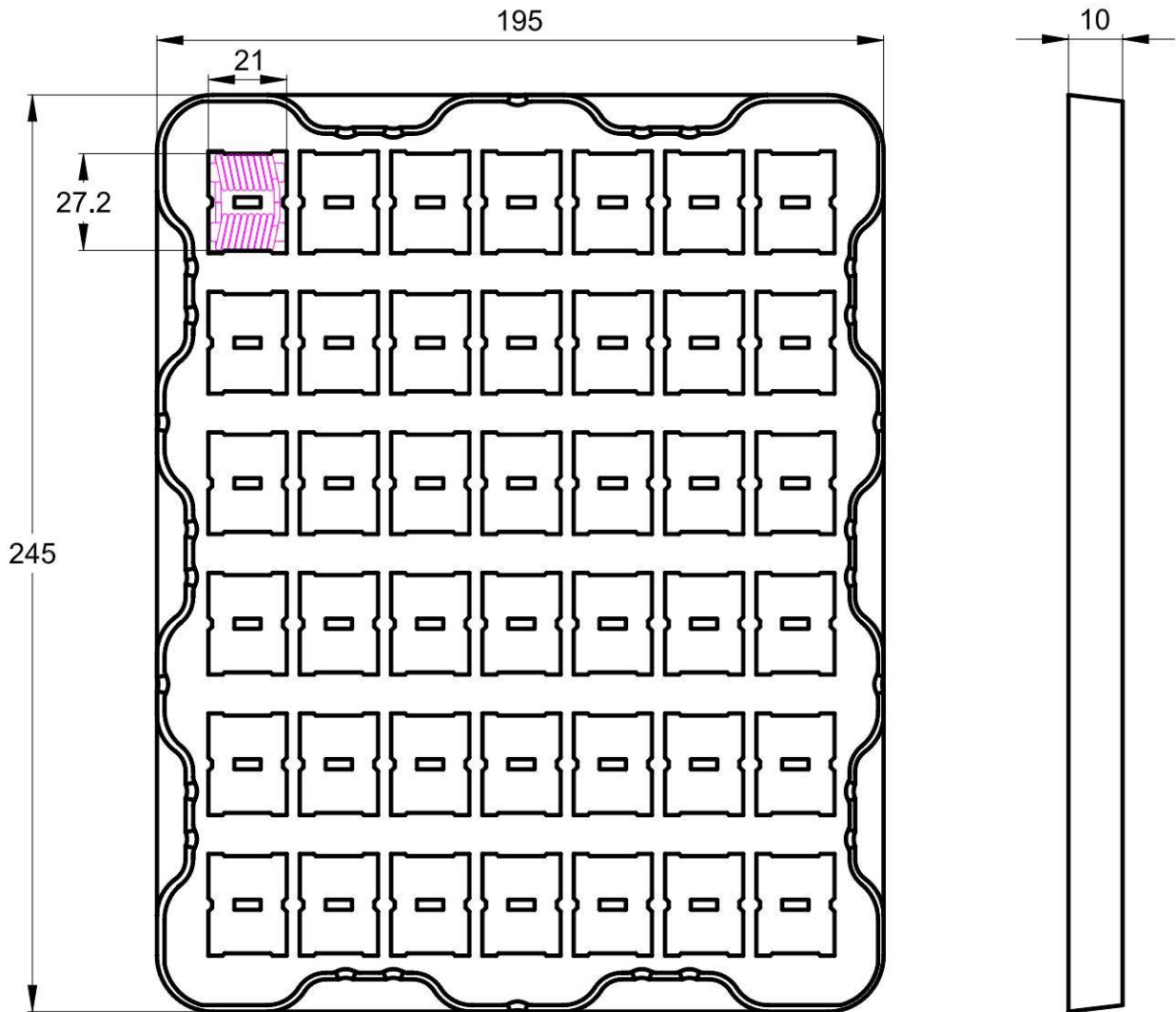


6 Packing specification

包装规格

6.1 Plastic tray dimensions (mm)

吸塑盘尺寸



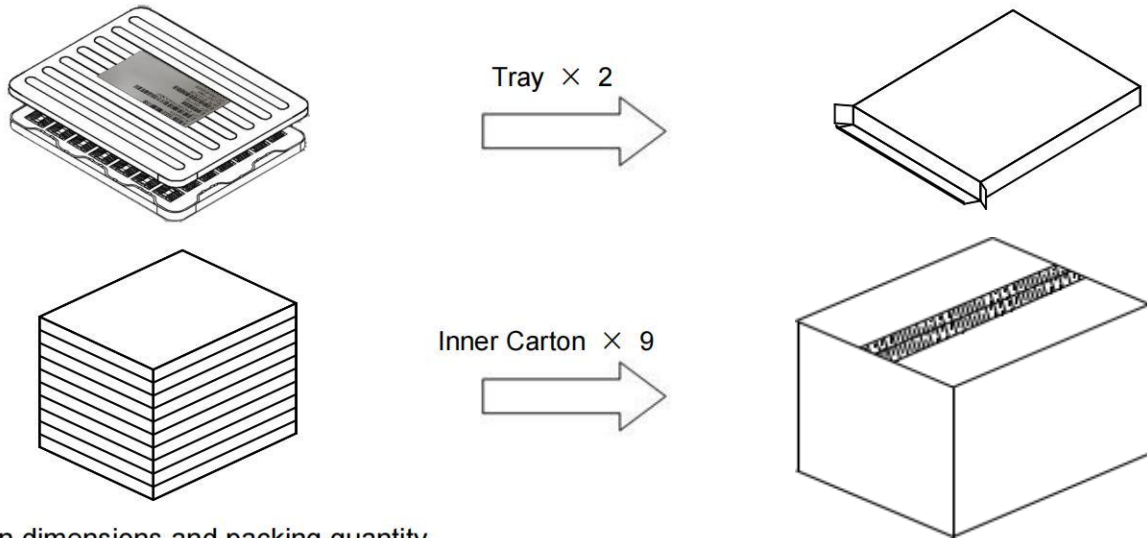


7 Packing specification

包装规格

7.1 Packing

包装



7.2 Carton dimensions and packing quantity

包装箱尺寸和包装数量

■ Inner Carton: 265×205×25mm
内包装盒

■ Out Carton : 275×232×261mm
外包装箱

| Product Series 产品系列 | Quantity / tray 数量 / 盘 | Inner Carton Quantity 内盒 包装数量 | Out Carton Quantity 外箱 包装总数量 |
|------------------------|---------------------------|----------------------------------|---------------------------------|
| CAR0515 | 84pcs | (84×2) = 168pcs | (168×9) = 1512pcs |

7.3 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