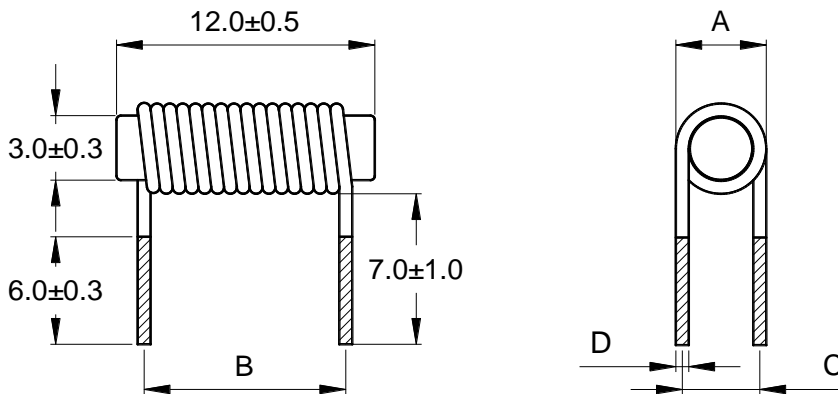


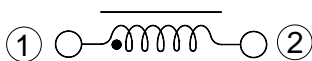
Outline: 产品概要

- 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



Part No. 品名	A	B	C	D
	Max	± 1.0	± 0.5	± 0.15
RAR0312-1R0M	5.20	8.50	3.95	0.90
RAR0312-1R8M	4.90	8.50	3.70	0.65
RAR0312-2R2M	4.80	8.50	3.65	0.60
RAR0312-3R3M	4.60	9.00	3.55	0.50
RAR0312-3R8M	4.60	9.50	3.55	0.50
RAR0312-4R7M	4.40	10.0	3.50	0.45
RAR0312-6R0M	4.30	10.0	3.45	0.40

3 Electrical characteristics

电气特性

Part No. 品名	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		
RAR0312-1R0M	1.00	3.42	4.45	10.0	13.6
RAR0312-1R8M	1.80	8.15	10.6	9.00	8.80
RAR0312-2R2M	2.20	10.2	13.3	8.00	7.90
RAR0312-3R3M	3.30	17.1	22.2	6.00	6.00
RAR0312-3R8M	3.80	19.0	24.8	5.00	5.80
RAR0312-4R7M	4.70	27.2	35.4	4.80	4.80
RAR0312-6R0M	6.00	36.0	46.8	4.50	4.20

■ 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 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。

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

