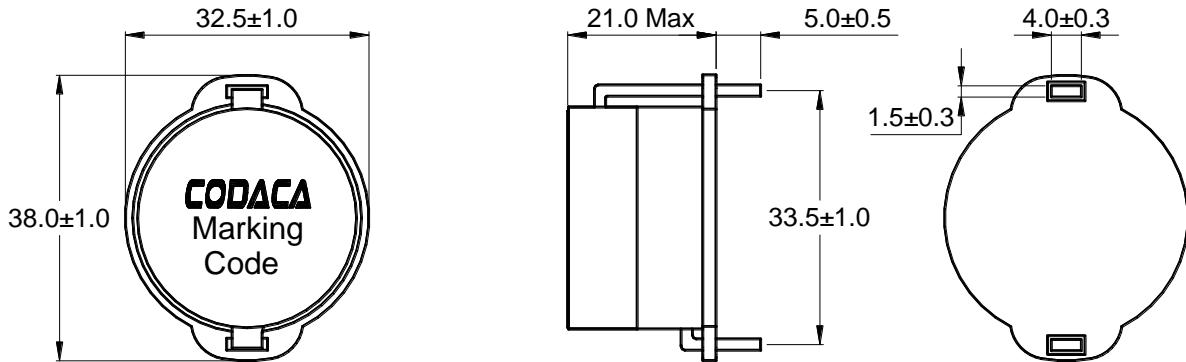




### Outline: 产品概要

- Magnetic shielded structure: excellent resistance to electromagnetic interference(EMI)  
磁屏蔽结构：抗电磁干扰(EMI)性能强
- 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。
- High temperature wire, closed magnetic circuit, ultra low buzz noise.  
耐高温铜线，磁路闭合，超低蜂鸣噪音。
- Operating temperature : -40°C ~ +125°C  
(Including coil's temperature rise)  
工作温度：-40°C ~ +125°C (包含线圈发热)

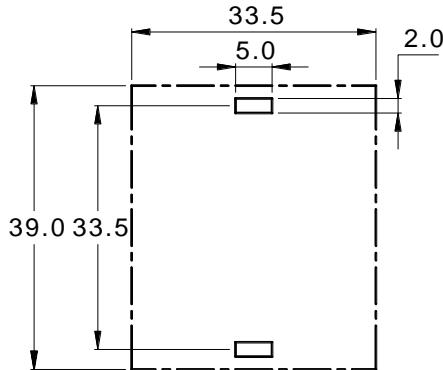
### 1 Appearance and dimensions (mm) 外形尺寸



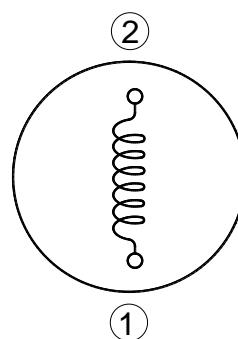
### 2 Marking 印字标识



### 3 Reference hole pattern (mm) 参考焊孔尺寸



### 4 Schematic 原理图



## 5 Electrical characteristics

## 电气特性

Part No. 型 号	Inductance ( $\mu$ H) 电感值 $\textcircled{1}$	D.C.R. (m $\Omega$ ) 直流电阻		Saturation current (A) 饱和电流 $\textcircled{2}$	Temperature rise current (A) 温升电流 $\textcircled{3}$
		$\pm 20\%$	Typical	Max	
CPT3020-100M	10.0	1.45	1.70	30.0	25.0

■ 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。

$\textcircled{1}$  Inductance measure condition at 100kHz, 0.1V.

电感测试条件为 100kHz, 0.1V。

$\textcircled{2}$  Saturation current: the actual value of DC current when the inductance decrease 30% of its initial value.

饱和电流：电感值下降其初始值的 30%时所加载的实际直流电流值。

$\textcircled{3}$  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。

## 6 Saturation current VS temperature rise current curve

## 饱和电流 VS 温升电流曲线

