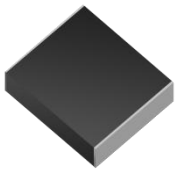
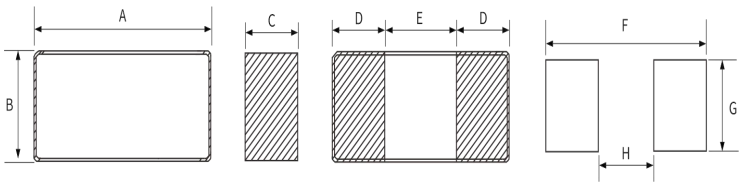
产品图示 product illustration	尺寸 Dimensions
	

(Unit:mm)

Series	A	B	C	D	E	F	G	H
PCT252012	2.5±0.20	2.0±0.20	1.2 Max	0.7±0.30	1.1±0.30	2.8 typ	2.3 typ	0.9 typ

环境数据	Environmental Data
■ 工作温度范围:-40°C 至+125°C(环境温度加自温升)	■ Operating temperature range: -40°C to +125°C(ambient plus self-temperature rise)
■ 焊接回流温度:符合 J-STD-020 标准	■ Solder reflow temperature: J-STD-020 compliant

特征	Description
■ 适用于大电流、低损耗的金属材料	■ Metal material for large current and low loss.
■ 采用金属磁粉芯实现高性能(高饱和电流 last)	■ High performance (Isat) realized by metal dust core.
■ 凭借低直流电阻(Rdc)实现低损耗特性	■ Low loss realized with low Rdc.
■ 闭合磁路设计，有限降低漏磁	■ Closed magnetic circuit design reduces leakage flux.
■ 乙烯基热喷涂工艺，表面致密性更优	■ Vinyl thermal spray, better surface compactness.
■ 100%无铅(Pb)，满足 RoHS 要求	■ 100% lead (Pb) free meet RoHS standard.

应用领域	Applications
■ DC/DC 转换器（直流-直流电源转换模块）	■ DC/DC converters.
■ 平板电脑、智能手机	■ Pad, Smartphone.
■ 便携式游戏设备、智能穿戴设备、Wi-Fi 模块	■ Portable gaming devices, Smart wear, Wi-Fi module.
■ 笔记本电脑、VR（虚拟现实）设备、AR（增强现实）设备	■ Notebooks, VR, AR.
■ LCD 显示屏、硬盘驱动器（HDD）、数码摄像机（DVC）、数码相机（DSC）等	■ LCD displays, HDDs, DVCs, DSCs, etc.
■ 基带电源、放大器、电源管理模块、模组电源、相机电源管理	■ Baseband power supply, Amplifier, Power management, Module power supply, Camera power manageme.

■ 产品命名规则 Product Naming Rules

系列名称 Series	尺寸 Dimensions	产品高度 Product Height	电感值 Inductance Value	电感公差 Inductance Tolerance
PCT	2520	12	1R0	M=±20%
①	②	③	④	⑤

■ 关键电气参数规格表 Key Electrical Parameter Specification Table

型号 Part Number	电感 Inductance	直流电阻 DC Resistance		饱和电流 Saturation Current		温升电流 Heating Rating Current	耐电压 Withstanding Voltage
	L0 (μH)	DCR (mΩ)		Isat (A)		Idc (A)	VDC
	±20 %, 1MHZ,1.0V	Max.	Typ.	Typ.	Max.	Typ.	Typ.
PCT252012-R24-M	0.24±20%	16	10	8.8	8.3	7.3	20
PCT252012-R33-M	0.33±20%	23	18	7.5	7	6.5	20
PCT252012-R47-M	0.47±20%	28	22	6.5	6	5.8	20
PCT252012-R68-M	0.68±20%	40	30	6.0	5.5	5.3	20
PCT252012-1R0-M	1.00±20%	50	40	5.0	4.5	4.3	20
PCT252012-1R5-M	1.50±20%	65	55	4.2	3.6	3.3	20
PCT252012-2R2-M	2.20±20%	100	85	3.5	3	2.8	20
PCT252012-3R3-M	3.30±20%	150	130	3.0	2.5	2.3	20
PCT252012-4R7-M	4.70±20%	220	188	2.1	1.8	1.6	20
PCT252012-100-M	10.0±20%	465	435	1.8	1.4	1.5	20

备注(Notes):

(1) 所有测试数据均以 25°C环境温度为基准。

All test data is referenced to 25°C ambient.

(2)当向线圈施加温升电流（Idc）时，会导致约 40°C的温升(△T)。

When applying the heat rating current DC (Idc) to coil, it will cause an approximate △T of 40°C .

(3) 当向线圈施加饱和电流直流（Isat）时，初始电感值将下降约 30%（典型值）

When applying the saturation current DC (Isat) to coil, it will cause the initial inductance valuel to drop 30%Typical.

(4) 工作温度范围：-40°C至+125°C。

Operating Temperature Range -40°C to +125°C .

(5) 额定电流：以 Isat（最大值）或 Irms（典型值）中较小者为准。

Rated current:Isat (Max.) or Irms (Typ.), whichever is smaller.

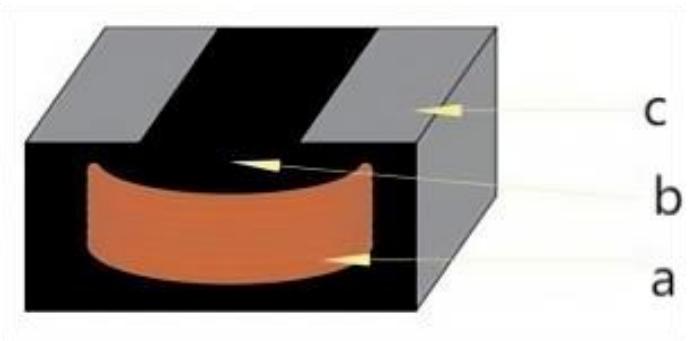
(6) 饱和电流：典型值，指使电感值较无电流状态下降约 30%的直流电流 。

Saturation Current: Typ. Value, DC current at which the inductance drops approximately 30% from its value without current;

(7) 温升电流：指在 20°C环境温度下导致约 40°C温升(△T)时对应的直流电流。

Heat Rating Current: DC current that causes an approximate △T of 40°C from 20°C ambient.

■ 材料清单 Material List



No.	项 目 Item	材 料 Materials
a	线 Wire	铜线 Copper wire
b	磁芯 Core	金属合金 Metal alloy
c	金属化电极 Terminal	锡 Sn

■ 储存条件/注意的事项 Storage conditions/Matters need attention

1、贮存温度、湿度条件 ：

Storage temperature and humidity conditions;

a、产品包装与载体:温度-10℃~+40℃，相对湿度低于 60%

Product packing with carrier tape:-10℃~40℃ and less than 60% RH;

b、单独的产品:温度-20℃~+60℃，相对湿度低于 60%

Product alone:-10℃~60℃ and less than 60% RH;

c、产品在 6 个月内使用(注意:产品一经拆开包装,须尽快使用)

Products should be used within 6 months.(Note that the product should be used as soon as possible once it is folded);

d、包装材料应保存在空气中不存在氯或硫的地方；

The packaging material should kept where no chlorine or sulfur exists in the air;

e、不要用手指触摸电极(焊接端子)，因为这可能导致焊接能力的下降；

Do not touch the electrodes (soldering terminals) with fingers as this may lead to deterioration of solder ability;

f、个别零件强烈建议使用镊子或真空取料机，散装搬运应确保尽量减少磨损和机械冲击；

The use of tweezers or vacuum pick-ups is strongly recommended for individual components. Bulk handling should ensure that abrasion and mechanical shock are minimized;