

SMPC201210A系列集成芯片电感 SMPC201210A Series Chip Molding Power Inductors



产品应用 Application

移动通讯设备	Portable Communication Equipment
手机, 平板	Mobile Phone, Tablet PC
智能穿戴设备	Wearable Devices



产品特征 Features

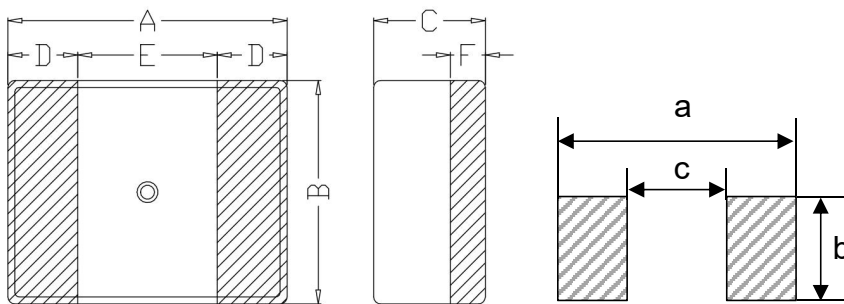
超薄大电流	Low Profile & High Current
磁屏蔽结构	Magnetically Shielded
温度范围: -40°C~+125°C	Temperature Range: -40°C~+125°C

产品规格型号表示方法 How to Order

SMPC201210A - **1R0** **M** **T**
(1) (2) (3) (4)

- (1) 系列名称 Series Name
- (2) 电感感值 Inductance(μH)
- (3) 精度误差 Tolerance
- (4) 内部代码 Internal Code

外型尺寸 Dimensions



Type	A	B	C	D	E	F	a	b	c
SMPC201210A(mm)	2.0 ^{+0.3} _{-0.0}	1.2 ^{+0.3} _{-0.0}	1.0±0.1	0.5±0.3	1.0 Typ.	0.35 Ref.	2.4 Typ.	1.5 Typ.	0.8 Typ.

性能参数 Electrical Characteristics

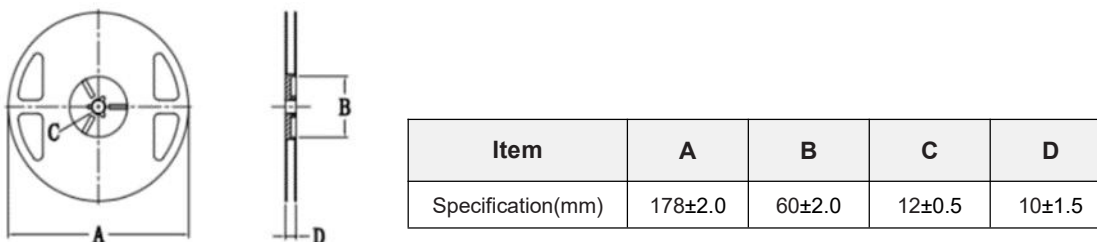
规格型号 Part No.	电感值 Inductance (μH)	直流电阻 R _{DC} (mΩ)		温升电流 I _{rms} (A)		饱和电流 I _{sat} (A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SMPC201210A-R24MT	0.24±20%	25	30	4.0	3.5	6.0	5.0
SMPC201210A-R33MT	0.33±20%	38	45	3.5	2.8	4.9	4.4
SMPC201210A-R47MT	0.47±20%	43	50	3.0	2.5	4.6	4.2
SMPC201210A-1R0MT	1.00±20%	80	96	2.4	2.1	3.0	2.5
SMPC201210A-2R2MT	2.20±20%	165	190	1.9	1.6	2.2	1.8

备注 Remark:

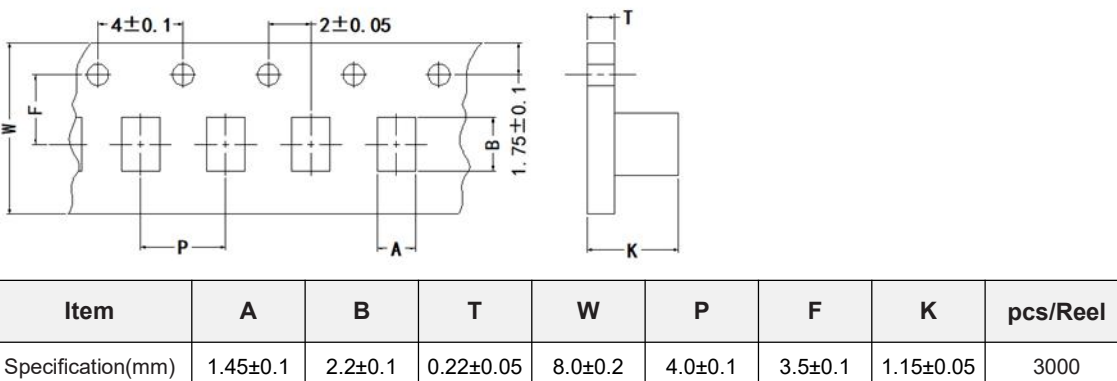
- 所有测试数据均参考25±3°C环境温度
All test data is referenced to 25±3°C ambient;
- 电感测试条件为用WK3260B或同等设备以1MHz/1.0V测试
Inductance tested at 1MHz/1.0V with WK3260B LCR Meter or equivalent;
- 饱和电流: 加电流时电感量下降小于或等于30%
I_{sat}: DC current at which the inductance drops 30% from its value without saturation;
- 温升电流: 加电流时产品温度上升小于等于40°C
I_{rms}: DC current that causes the temperature rise (ΔT =40°C) from ambient temperature;
- 工作温度 (包括自身发热) : -40°C~+ 125°C
Operating temperature range(including coil's self-temperature rise): -40°C~+ 125°C.

包装材料及规格 Packaging Materials and Specifications

卷轴尺寸图 Reel Size





包装带尺寸图 Tape Size





内外箱标识内容 Inside and Outside Box Identification Content




CYGE 创一科技 科技创一 Made in China
<HSF/ROHS>


Customer Name: XXXXXXXX
 2

P/O: XXXXXXXXXXXXXXXXXXXX


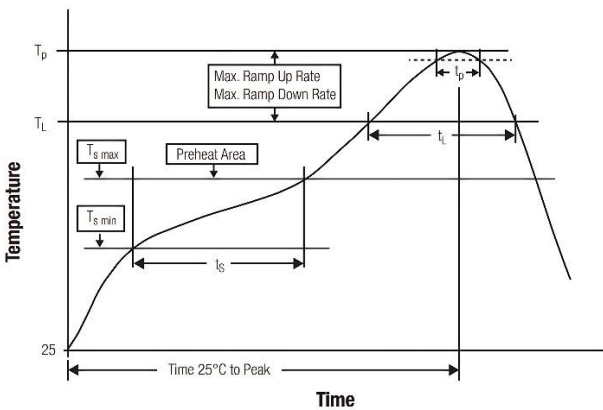
Customer P/N: XXXXXXXXXXXX


CYGE P/N: XXXXXXXXXXXX


LOT NO: XXXXXXXXXX DATE: XXXXX QTY: XXXX PCS
  

 匠心致远 追求卓越 感动人心
Following ingenuity, pursuing excellence, touching hearts

推荐回流焊条件 Recommended Reflow Soldering Conditions



Profile Feature	Lead-Free Assembly
Preheat Temperature Min ($T_s\ min$)	150°C
Preheat Temperature Max ($T_s\ max$)	200°C
Preheat Time t_s from $T_s\ min$ to $T_s\ max$	60-120 seconds
Average Ramp-Up Rate (T_L to T_p)	3°C /second max.
Liquidous Temperature (T_L)	217°C
Time t_L maintained above T_L (t_L)	60-150 seconds
Peak/Classification Temperature (T_p)	255°C
Time within 5°C of actual peak temperature (t_p)	20-30 second
Ramp-down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

储存条件/注意的事项 Storage Conditions/Note Things

- 1、贮存温度、湿度条件 Storage temperature and humidity conditions :
 - 1.1、产品包装与载体: -5°C ~ +40°C, 低于60% RH.
Product packing with Carrier tape: -5°C ~ +40°C and less than 60% RH.
 - 1.2、单独的产品: -20°C ~ +60°C, 低于60% RH.
Product alone: -20°C ~ +60°C and less than 60% RH.
- 2、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) .
- 3、包装材料应保存在空气中不存在氯或硫的地方.
The packaging material should be kept where no chlorine or sulfur exists in the air.
- 4、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 solderability.
- 5、个别零件强烈建议使用镊子或真空取料机散装搬运,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.