
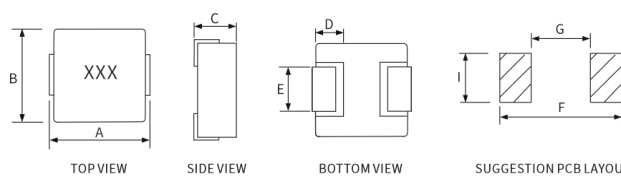


0420 series

产品图示 product illustration	外观尺寸 Shape and Dimensions
	

Series	A	B	C	D	E	F	G	I
SRG0420	4.6±0.3	4.1±0.3	2.0Max	1.1±0.3	2.0±0.3	5.2Typ	2.5Typ	2.5Typ

环境数据	Environmental Data
<ul style="list-style-type: none"> 存储温度范围:-55°C 至+125°C 	<ul style="list-style-type: none"> Storage temperature range: -55°C to +125°C
<ul style="list-style-type: none"> 工作温度范围:-55°C 至+125°C(环境温度加自温升) 	<ul style="list-style-type: none"> Operating temperature range: -55°C to +125°C(ambient plus self-temperature rise)
<ul style="list-style-type: none"> 焊接回流温度:符合 J-STD-020 标准 	<ul style="list-style-type: none"> Solder reflow temperature: J-STD-020 compliant

描述	Description
<ul style="list-style-type: none"> 无卤素 	<ul style="list-style-type: none"> Halogen Free
<ul style="list-style-type: none"> 最高总工作温度 125°C 	<ul style="list-style-type: none"> 125°C maximum total temperature operation
<ul style="list-style-type: none"> 金属粉末磁芯材料 	<ul style="list-style-type: none"> Metal powder core material
<ul style="list-style-type: none"> 磁屏蔽, 电磁干扰 	<ul style="list-style-type: none"> Magnetically shielded, low EMI
<ul style="list-style-type: none"> 高载流能力, 低磁芯损耗 	<ul style="list-style-type: none"> High current carrying capacity, Low core losses
<ul style="list-style-type: none"> 感值范围从 0.10μH 到 22.0μH 	<ul style="list-style-type: none"> Inductance range from 0.10μH to 22.0μH
<ul style="list-style-type: none"> 电流范围从 1.2 安培至 22 安培 	<ul style="list-style-type: none"> Current range from 1.2 to 22 Amps
<ul style="list-style-type: none"> 频率范围高达 5 MHz 	<ul style="list-style-type: none"> Frequency range up to 5 MHz
<ul style="list-style-type: none"> 符合 RoHS 标准 	<ul style="list-style-type: none"> RoHS compliant

应用领域	Applications
<ul style="list-style-type: none"> 电压调节器模块(VRM) 	<ul style="list-style-type: none"> Voltage Regulator Module (VRM)
<ul style="list-style-type: none"> 多相稳压器 	<ul style="list-style-type: none"> Multi-phase regulators
<ul style="list-style-type: none"> 负载点模块 	<ul style="list-style-type: none"> Point-of-load modules
<ul style="list-style-type: none"> 智能手机 PoL 模块 	<ul style="list-style-type: none"> Smart phone POL modules
<ul style="list-style-type: none"> 固态硬盘模块 	<ul style="list-style-type: none"> SSD modules
<ul style="list-style-type: none"> 笔记本电源稳压器 	<ul style="list-style-type: none"> Notebook regulators
<ul style="list-style-type: none"> 电池供电系统 	<ul style="list-style-type: none"> Battery power systems
<ul style="list-style-type: none"> 显卡 	<ul style="list-style-type: none"> Graphics cards
<ul style="list-style-type: none"> 数据网络与存储系统 	<ul style="list-style-type: none"> Data networking and storage systems

■ 产品命名规则(Product Naming Rules)

系列名称 Series	尺寸 Dimensions	电感值 Inductance Value	电感公差 Inductance Tolerance
SRG	0420	1R0	M=±20%
①	②	③	④

■ 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
	L0 (μH)	DCR (mΩ)	Isat (A)	Idc (A)
	±20 %, 1MHZ, 1.0V	Max	Typ	Typ
SRG0420-1R0-M	1	24	7.0	5.0
SRG0420-1R5-M	1.5	36	6.5	4.5
SRG0420-2R2-M	2.2	49	5.0	4.0
SRG0420-3R3-M	3.3	76	4.0	3.5
SRG0420-4R7-M	4.7	105	3.5	3.0
SRG0420-6R8-M	6.8	157	2.5	2.2
SRG0420-100-M	10	243	2.0	1.8
SRG0420-220-M	22	500	1.3	1.2

备注(Notes)

- 所有测试数据均以 25°C 环境温度作为参照基准。
All test data is referenced to 25 °C ambient.
- 工作温度范围-55°C 至+125°C。
Operating temperature range-55 °C to + 125°C.
- Idc(A):会导致近似 ΔT 值为 40°C(参考环境温度为 25°C)的直流电流(A)。
Idc(A) :Dc current (A) that will cause an approximate ΔT of 40°C(reference ambient temperature is 25°C)
- Isat(A):会导致 L0 下降约 30% 的直流电流(A)。
Isat(A) :DC current (A)that will cause L0 to drop approximately 30 %
- 在最恶劣工况下运行时, 部件温度(环境温度+温升)不应超过 125°C。这涉及电路设计、元件布局、印制板走线尺寸与厚度、气流分布以及其它散热措施会影响零件温度。零件温度应在最终应用时予以确认。
The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions Circuit design, component placement, PWB trace size and thickness , airflow and other cooling provisions all affect the part temperature . Part temperature should be verified in the end application.

■ 性能图表(Temperature rise curve graph)

