
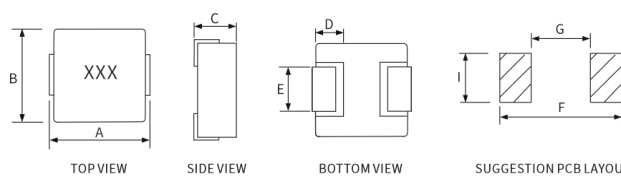


0518 series

产品图示 product illustration	外观尺寸 Shape and Dimensions
	

Series	A	B	C	D	E	F	G	I
SRG0518	5.2±0.3	5.2±0.3	1.8Max	1.2±0.3	2.2±0.3	6.0 Typ	3.0 Typ	2.7 Typ

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	0518	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
SRG0518-100-M	10	155	3.0	2.5

备注(Notes)

- 所有测试数据均以 25°C 环境温度为参照基准。
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)

