
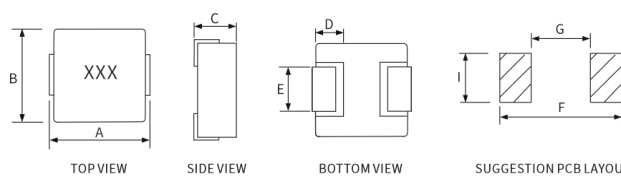


# 0650 series

产品图示 product illustration	外观尺寸 Shape and Dimensions
	

Series	A	B	C	D	E	F	G	I
SRG0650	7.5 Max	6.6±0.2	5.0 Max	1.6±0.3	3.0±0.3	8.4 Typ	3.7 Typ	3.5 Typ

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

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

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

■ 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	0650	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
SRG0650-6R8-M	6.8	32	6.5	6.0
SRG0650-100-M	10	47.5	6.5	5.5
SRG0650-150-M	15	70	5.5	4.0
SRG0650-220-M	22	103	4.5	3.5
SRG0650-330-M	33	170	3.2	2.0
SRG0650-470-M	47	210	2.5	2.0

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)

