

NR合金磁胶电感

Shielded Power Inductor (NR Alloy)



特性

Characteristics

合金磁芯上的金属化可产生优异的抗冲击性和无损坏的耐久性

Metallization on Metal Alloy result in excellent shock resistance and damage-free durability

闭合磁路设计减少漏磁和电磁干扰磁干扰 (EMI)

Close magnetic circuit design reduces leakage flux and electro magnetic interference (EMI)

铁基金属材料铁芯提供大的饱和电流

Fe base metal material core provides large saturation current

自动化生产确保了高质量和一致性

Automation production ensures high quality and consistency

应用

Application

蓝光光盘刻录机，机顶盒

Blue-ray disc recorders, set top box

笔记本电脑，台式电脑，服务器，显卡

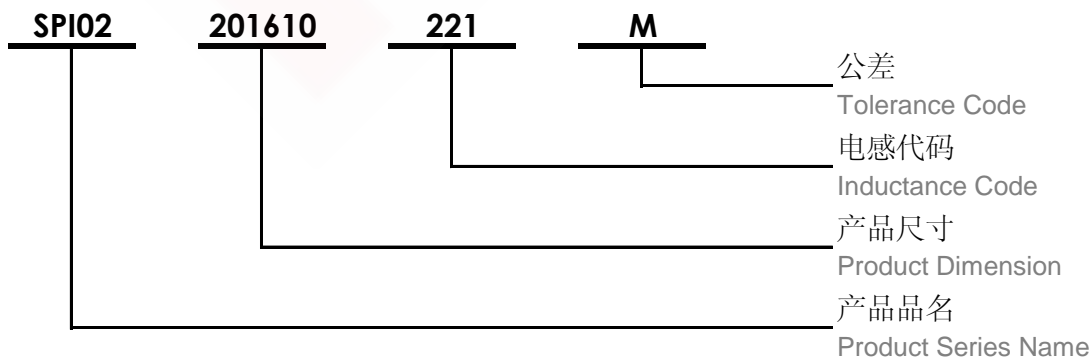
Notebooks, Desktop computers, Server, Graphic cards

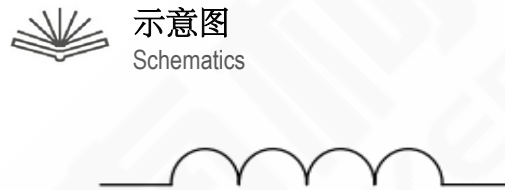
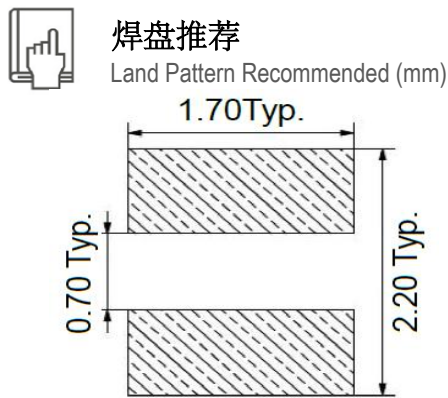
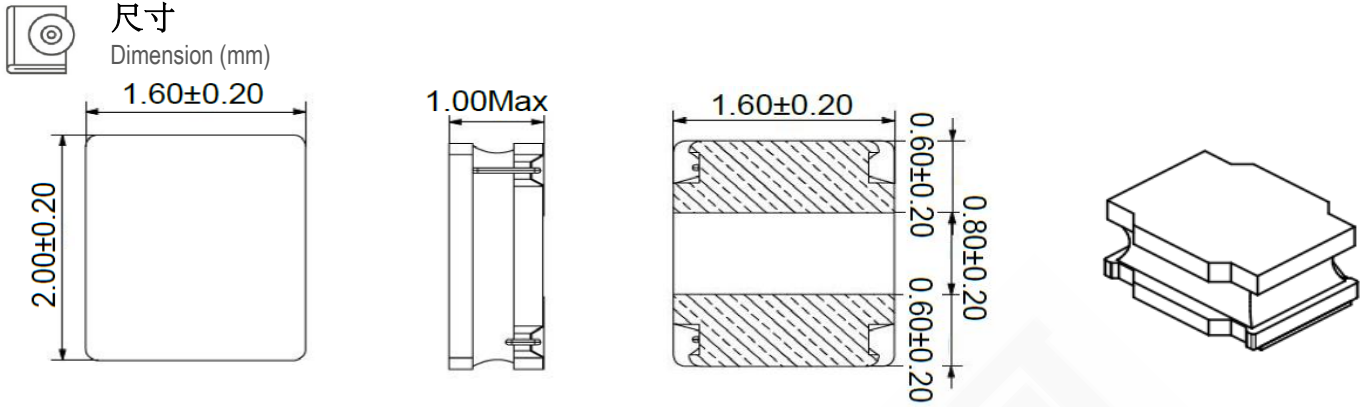
便携式游戏设备、个人导航系统、个人多媒体设备

Portable gaming devices, personal navigation systems, personal multimedia devices

产品品名介绍

Product Number Structure





电性特性
Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I _r typ 40°C (A)	直流电阻 DC Resistance DCR _{max} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI02-201610-R24M	0.24 ±20%	4.80	0.028	8.00	2,000
SPI02-201610-R33M	0.33 ±20%	3.50	0.041	6.20	2,000
SPI02-201610-R47M	0.47 ±20%	3.50	0.046	5.50	2,000
SPI02-201610-R68M	0.68 ±20%	3.00	0.075	5.00	2,000
SPI02-201610-1R0M	1.00 ±20%	2.70	0.102	3.60	2,000
SPI02-201610-1R5M	1.50 ±20%	2.05	0.138	3.00	2,000
SPI02-201610-2R2M	2.20 ±20%	1.90	0.216	2.50	2,000
SPI02-201610-4R7M	4.70 ±20%	1.05	0.390	1.60	2,000

测试状态

Test Condition

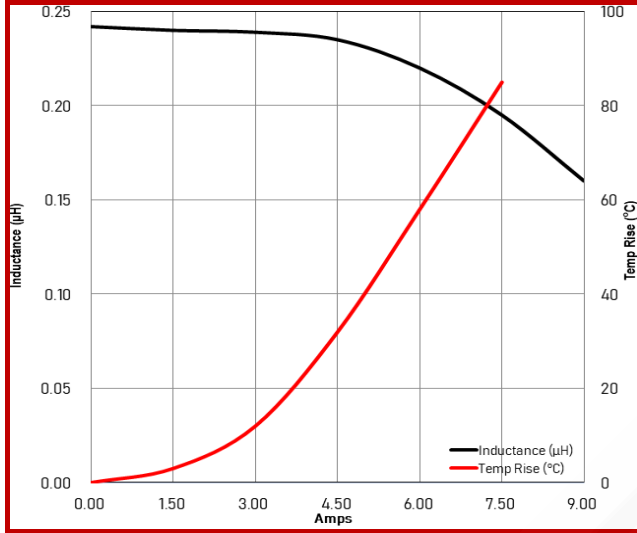
- ☆ 电感测试条件为 1.0MHz / 1.0V
Inductance measure condition at 1.0MHz / 1.0V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



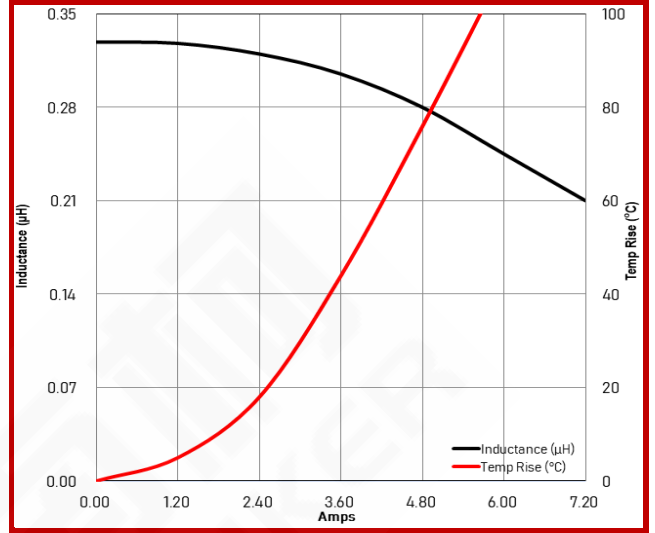
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

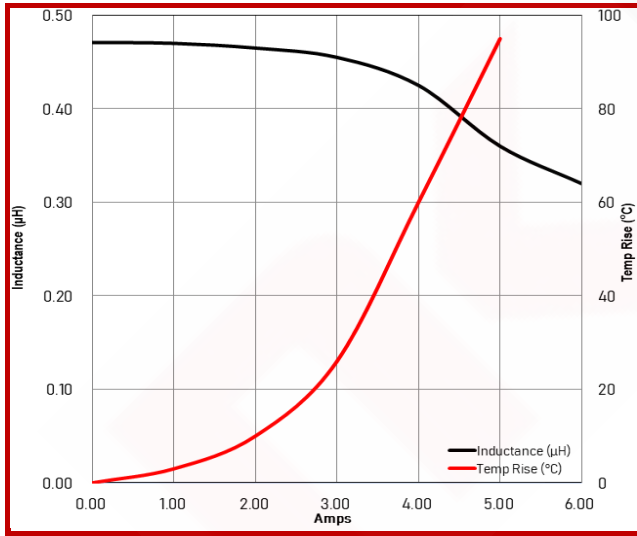
SPI02-201610-R24M



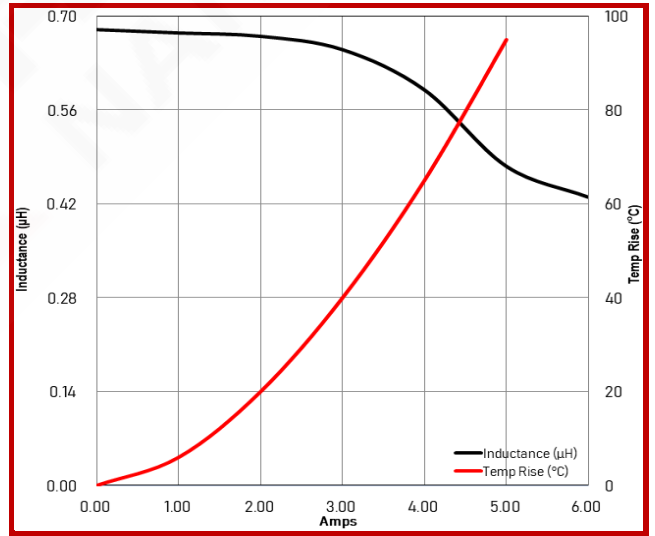
SPI02-201610-R33M



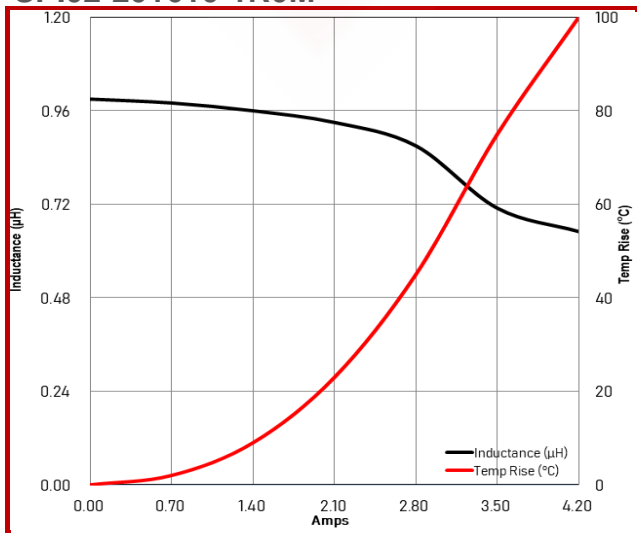
SPI02-201610-R47M



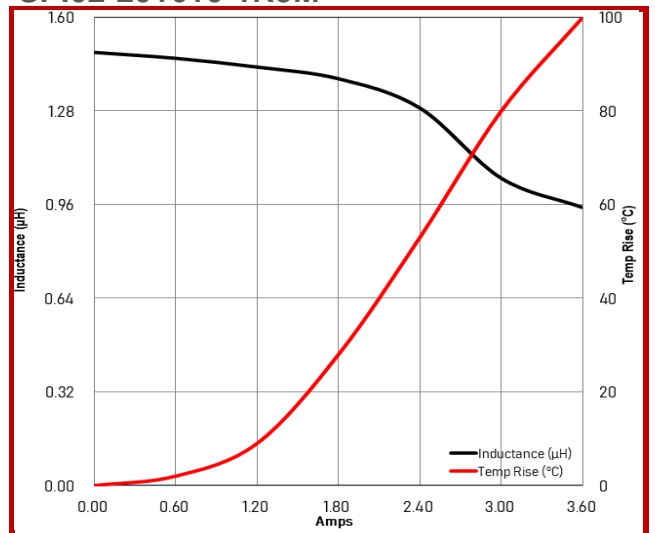
SPI02-201610-R68M



SPI02-201610-1R0M



SPI02-201610-1R5M

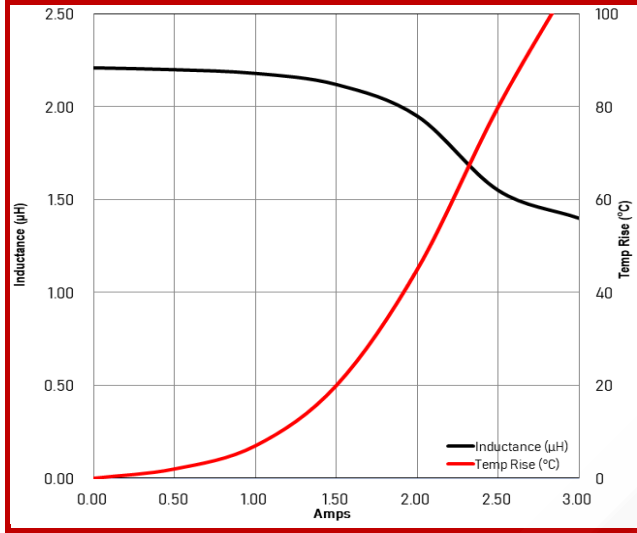




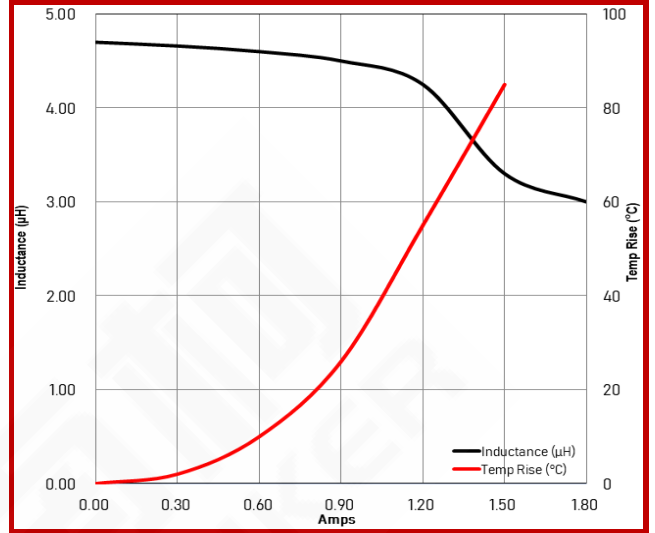
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI02-201610-2R2M



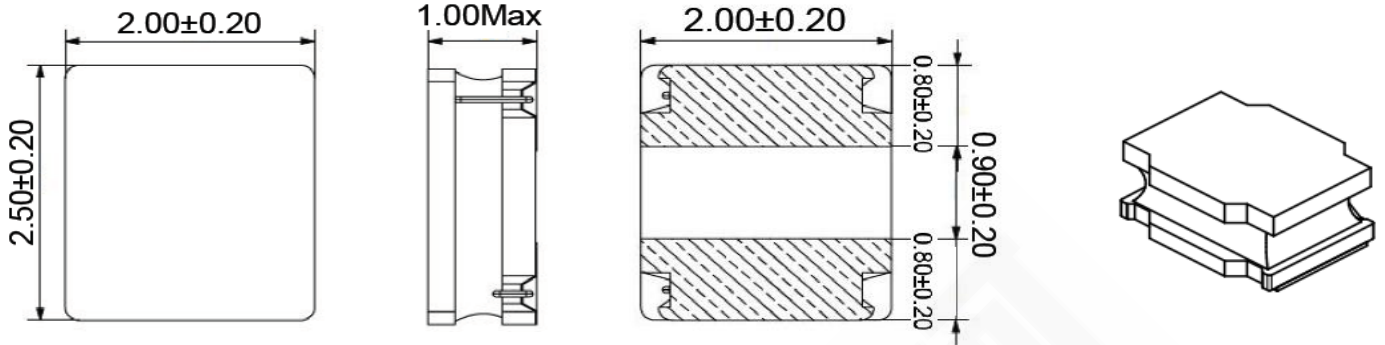
SPI02-201610-4R7M





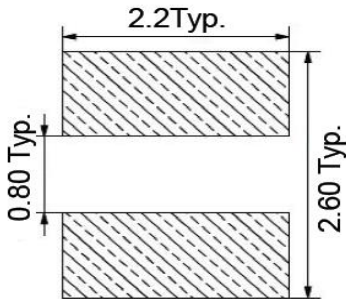
尺寸

Dimension (mm)



焊盘推荐

Land Pattern Recommended (mm)



示意图

Schematics



电性特性

Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I _r typ 40°C (A)	直流电阻 DC Resistance DCR _{max} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI02-252010-R24M	0.24 ±20%	5.70	0.026	9.00	2,000
SPI02-252010-R33M	0.33 ±20%	5.00	0.034	7.20	2,000
SPI02-252010-R47M	0.47 ±20%	4.00	0.042	6.60	2,000
SPI02-252010-R68M	0.68 ±20%	3.90	0.052	4.80	2,000
SPI02-252010-1R0M	1.00 ±20%	3.00	0.078	4.30	2,000
SPI02-252010-1R5M	1.50 ±20%	2.45	0.114	3.20	2,000
SPI02-252010-2R2M	2.20 ±20%	2.10	0.168	2.60	2,000
SPI02-252010-4R7M	4.70 ±20%	1.40	0.312	2.00	2,000

测试状态

Test Condition

☆ 电感测试条件为 1.0MHz / 1.0V

Inductance measure condition at 1.0MHz / 1.0V

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值

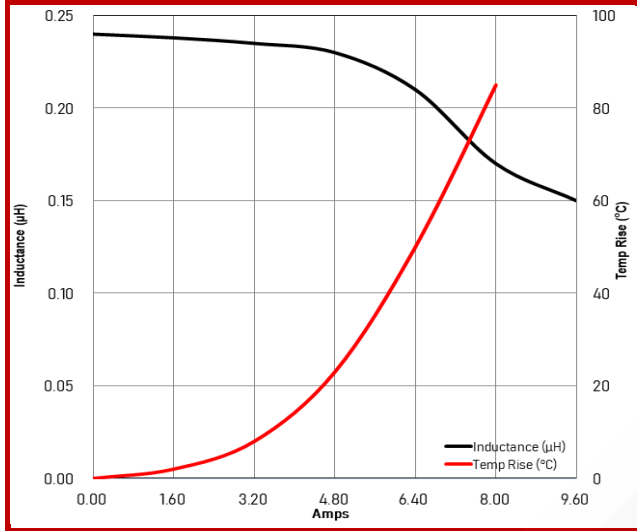
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



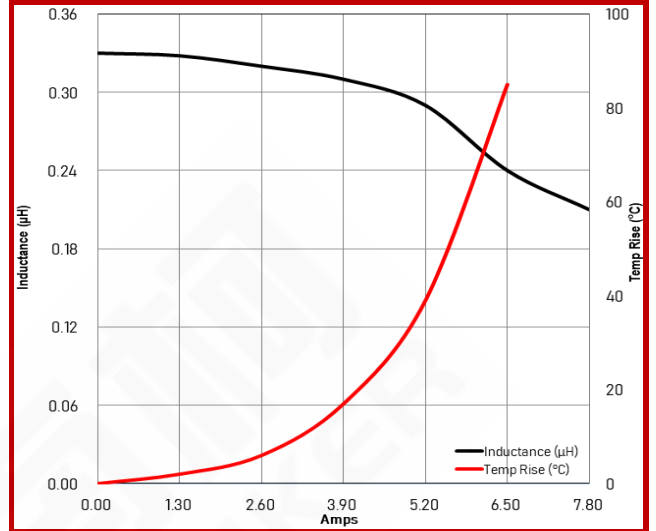
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

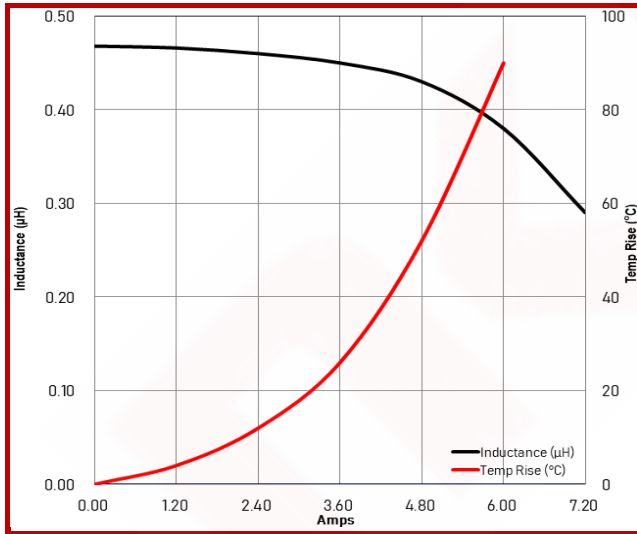
SPI02-252010-R24M



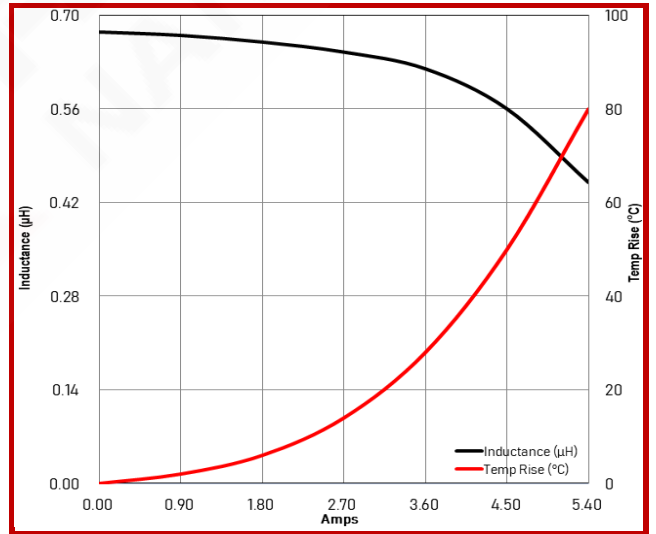
SPI02-252010-R33M



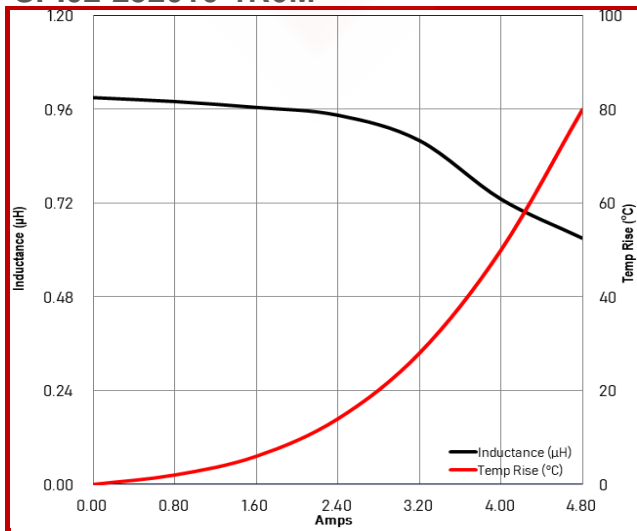
SPI02-252010-R47M



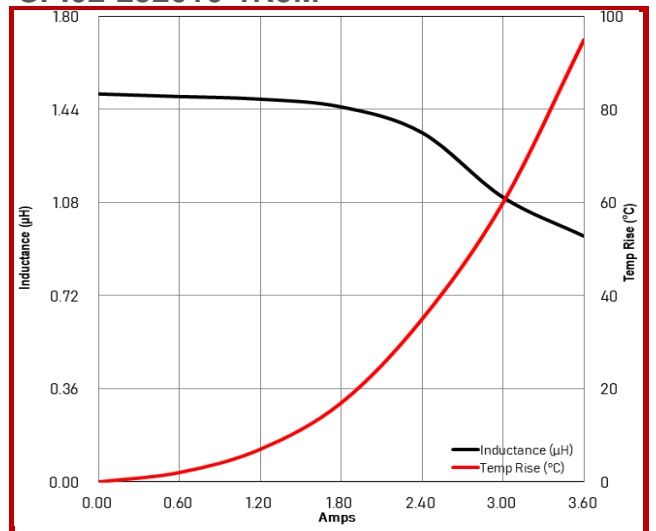
SPI02-252010-R68M



SPI02-252010-1R0M



SPI02-252010-1R5M

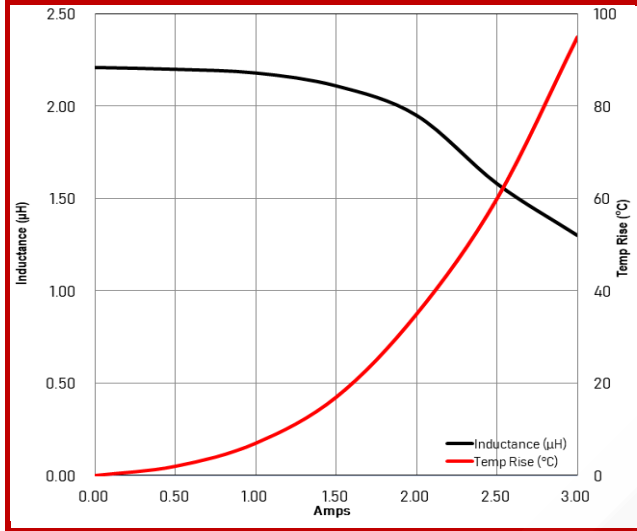




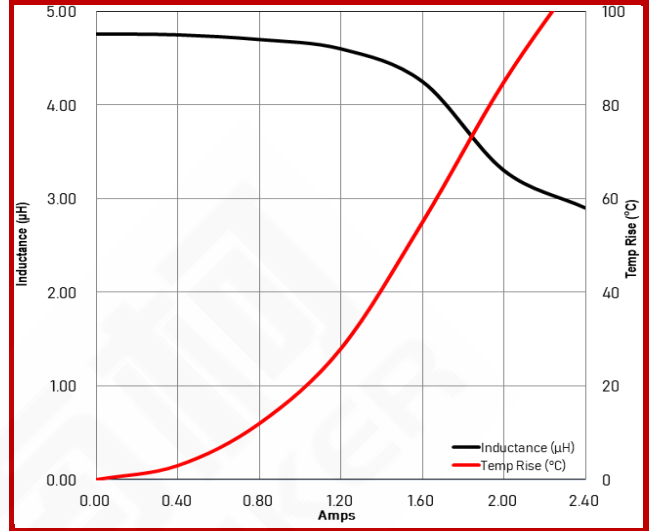
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI02-252010-2R2M



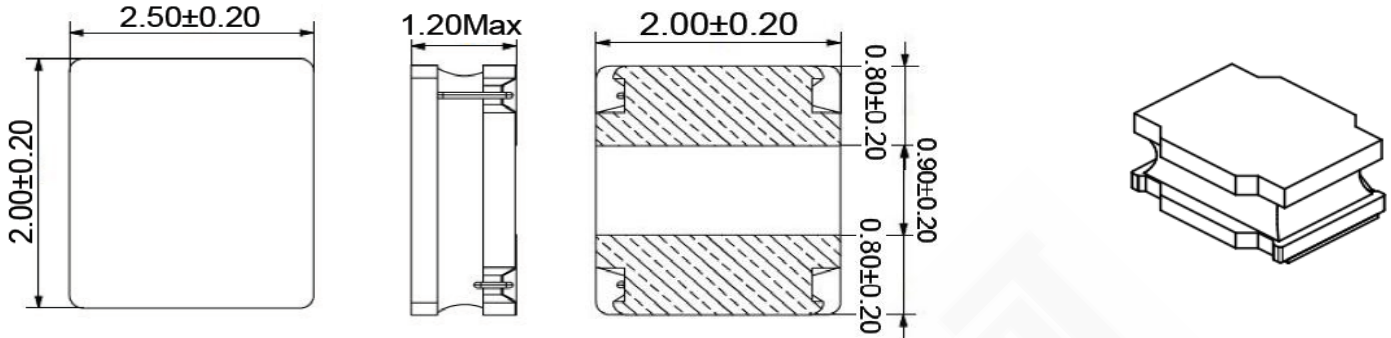
SPI02-252010-4R7M





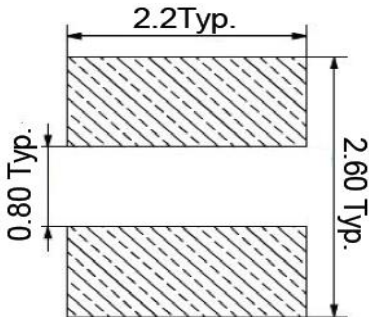
尺寸

Dimension (mm)



焊盘推荐

Land Pattern Recommended (mm)



示意图

Schematics



电性特性

Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I_r typ 40°C (A)	直流电阻 DC Resistance DCRmax (m Ω)	饱和电流 Saturation Current I_{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI02-252012-R47M	0.47 $\pm 20\%$	4.70	36	6.40	2,000
SPI02-252012-1R0M	1.00 $\pm 20\%$	3.60	60	5.20	2,000
SPI02-252012-1R5M	1.50 $\pm 20\%$	2.80	82	3.80	2,000
SPI02-252012-2R2M	2.20 $\pm 20\%$	2.40	120	4.00	2,000
SPI02-252012-3R3M	3.30 $\pm 20\%$	2.05	163	2.10	2,000
SPI02-252012-4R7M	4.70 $\pm 20\%$	1.65	270	2.60	2,000
SPI02-252012-100M	10.00 $\pm 20\%$	1.05	460	1.40	2,000

测试状态

Test Condition

☆ 电感测试条件为 1.0MHz / 1.0V

Inductance measure condition at 1.0MHz / 1.0V

☆ 工作温度: $-40^\circ\text{C} \sim +125^\circ\text{C}$

Operating Temperature: $-40^\circ\text{C} \sim +125^\circ\text{C}$

☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值

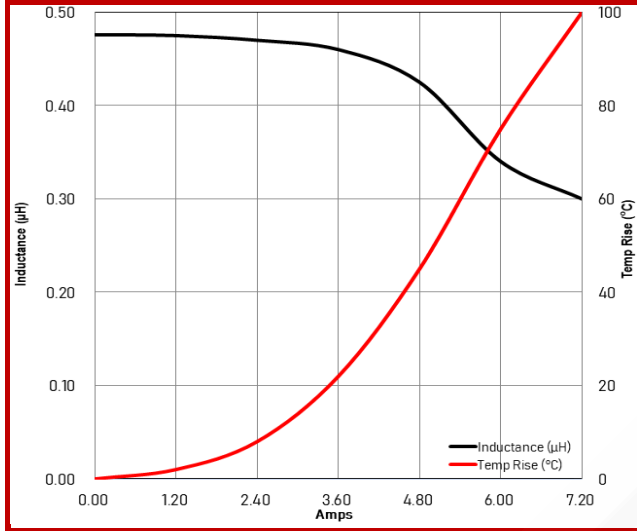
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



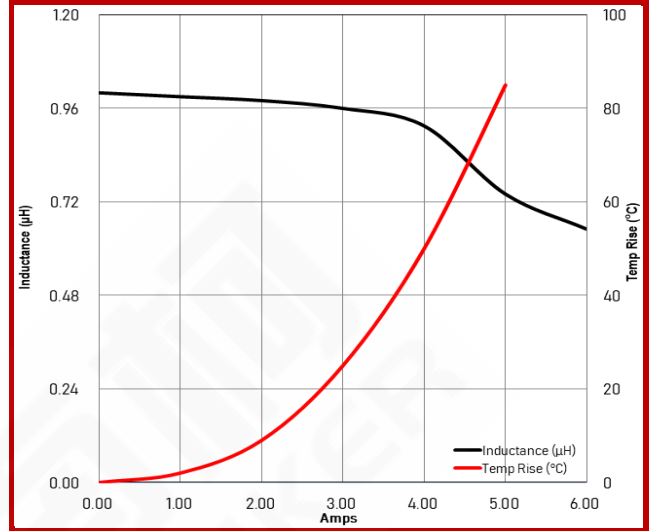
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

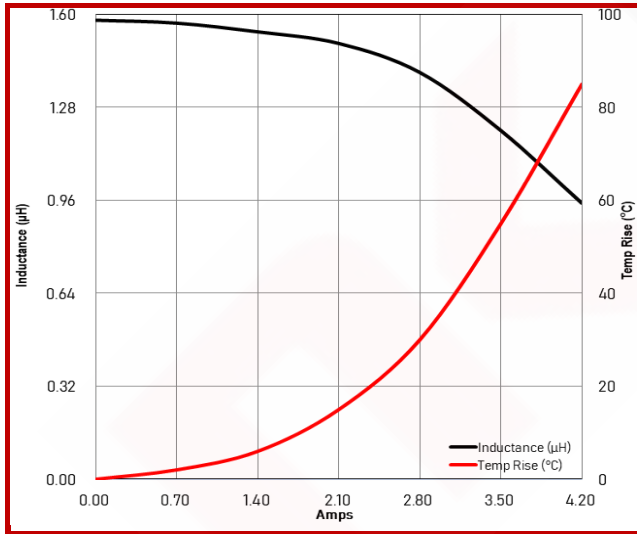
SPI02-252012-R47M



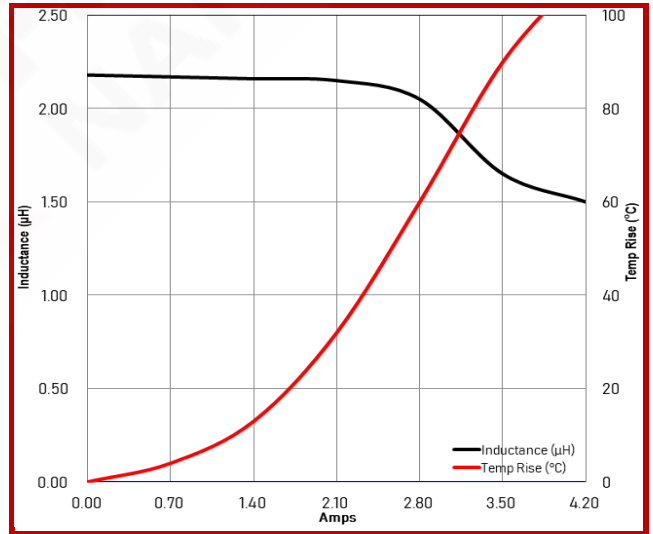
SPI02-252012-1R0M



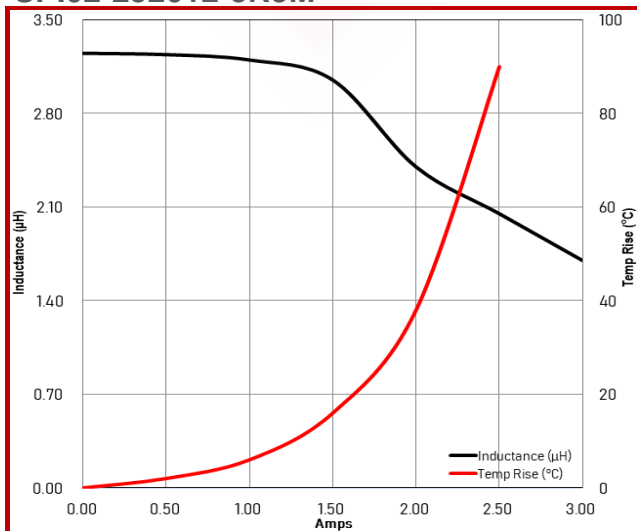
SPI02-252012-1R5M



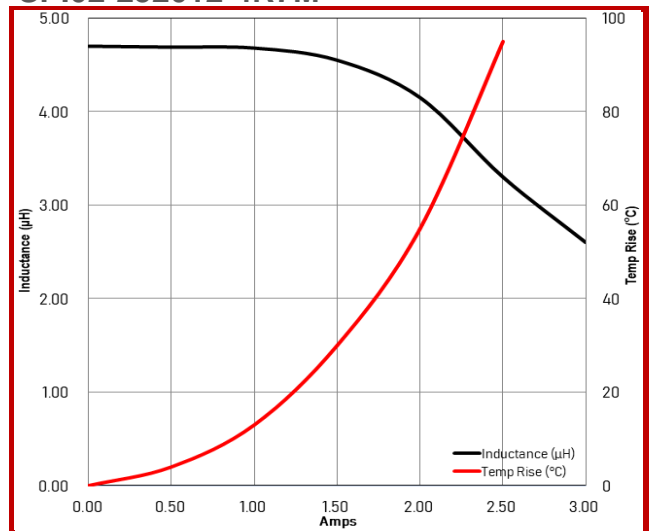
SPI02-252012-2R2M



SPI02-252012-3R3M



SPI02-252012-4R7M

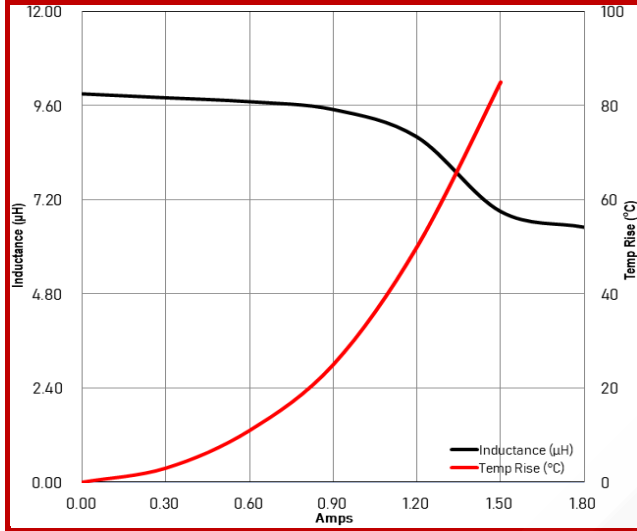




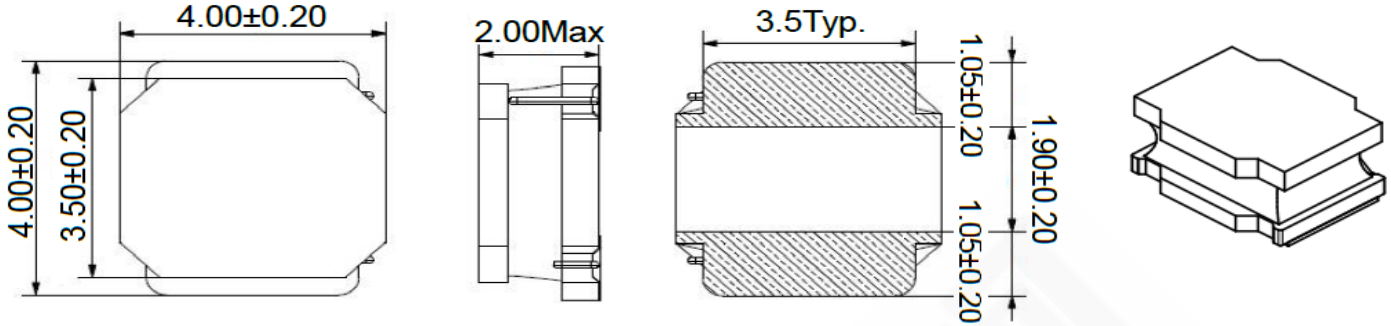
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI02-252012-100M



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

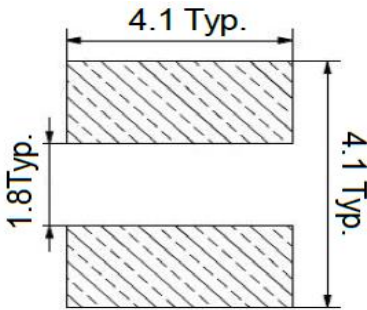


示意图 Schematics



电性特性 Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I _r typ 40°C (A)	直流电阻 DC Resistance DCR _{max} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI02-4020-R22M	0.22 ±20%	9.50	0.013	22.00	3,000
SPI02-4020-R47M	0.47 ±20%	7.40	0.022	15.50	3,000
SPI02-4020-R68M	0.68 ±20%	7.40	0.022	11.10	3,000
SPI02-4020-1R0M	1.00 ±20%	6.40	0.026	11.10	3,000
SPI02-4020-1R5M	1.50 ±20%	6.00	0.036	9.60	3,000
SPI02-4020-2R2M	2.20 ±20%	5.00	0.048	7.60	3,000
SPI02-4020-3R3M	3.30 ±20%	4.00	0.072	5.90	3,000
SPI02-4020-4R7M	4.70 ±20%	3.30	0.108	4.90	3,000
SPI02-4020-6R8M	6.80 ±20%	2.80	0.156	4.20	3,000
SPI02-4020-100M	10.00 ±20%	2.35	0.216	3.50	3,000

测试状态

Test Condition

☆ 电感测试条件为 1.0MHz / 1.0V

Inductance measure condition at 1.0MHz / 1.0V

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值

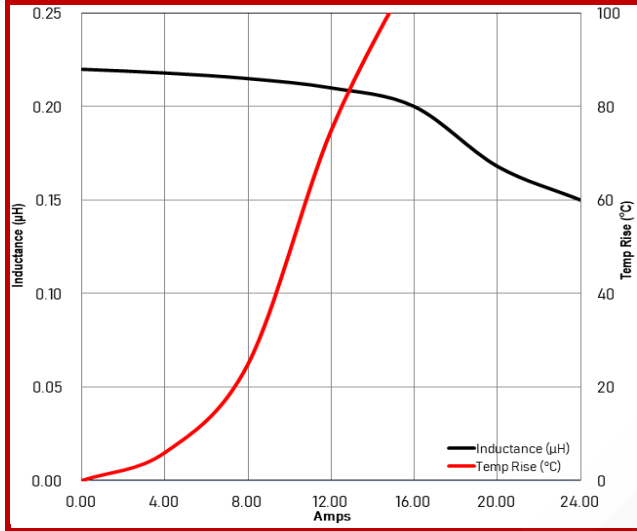
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



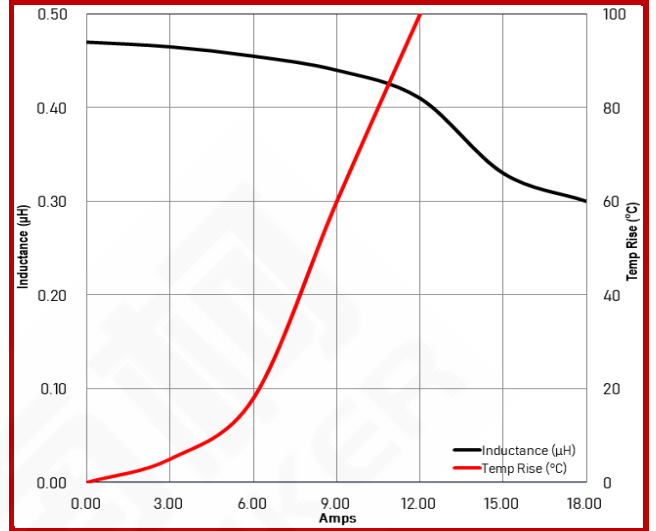
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

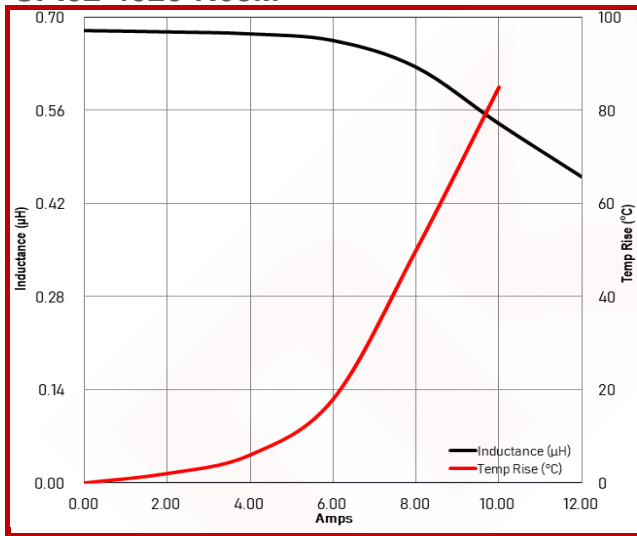
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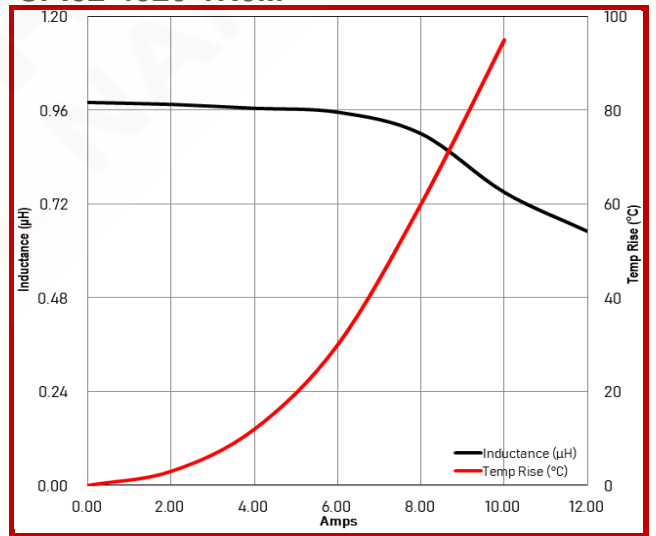
SPI02-4020-R47M



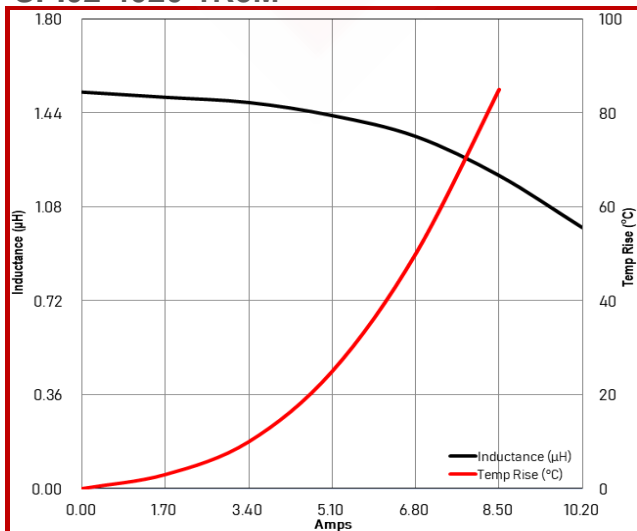
SPI02-4020-R68M



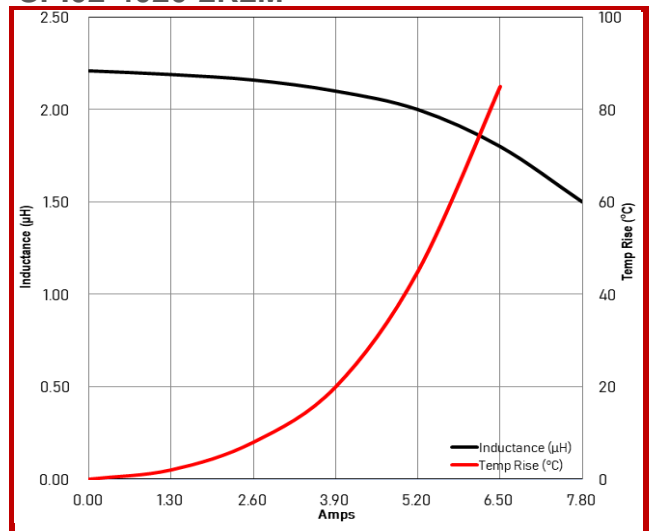
SPI02-4020-1R0M



SPI02-4020-1R5M



SPI02-4020-2R2M

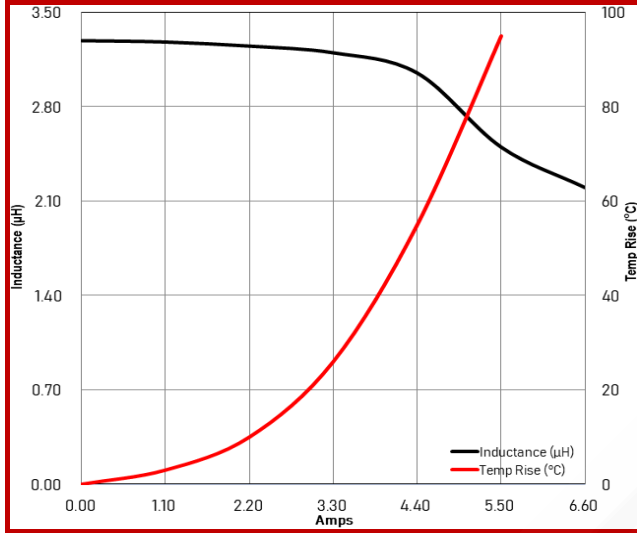




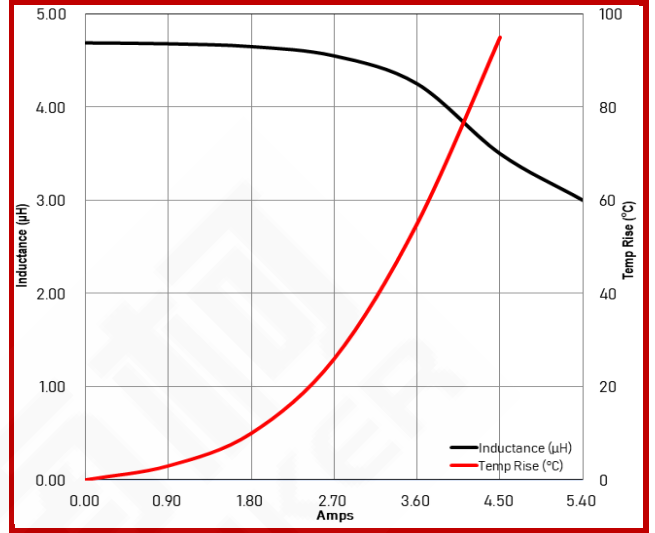
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

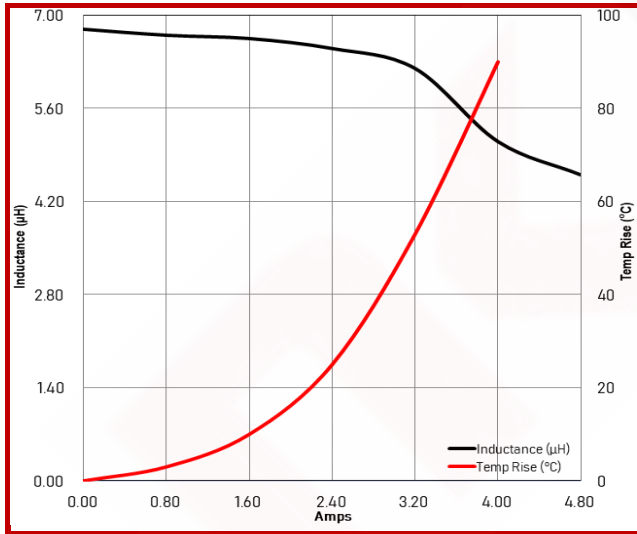
SPI02-4020-3R3M



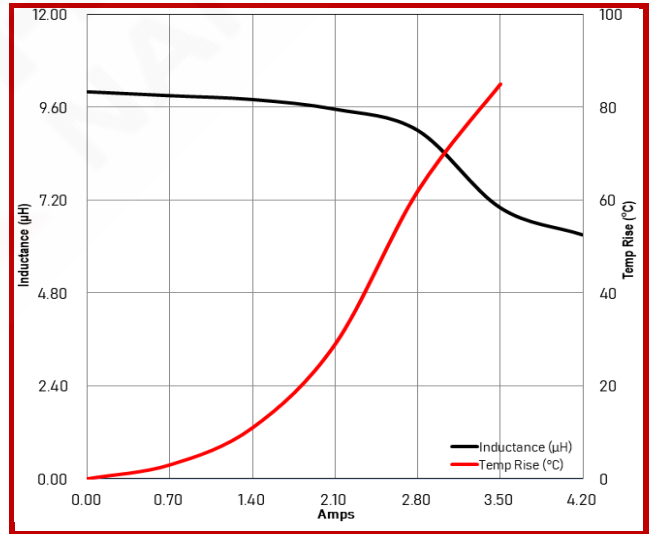
SPI02-4020-4R7M



SPI02-4020-6R8M



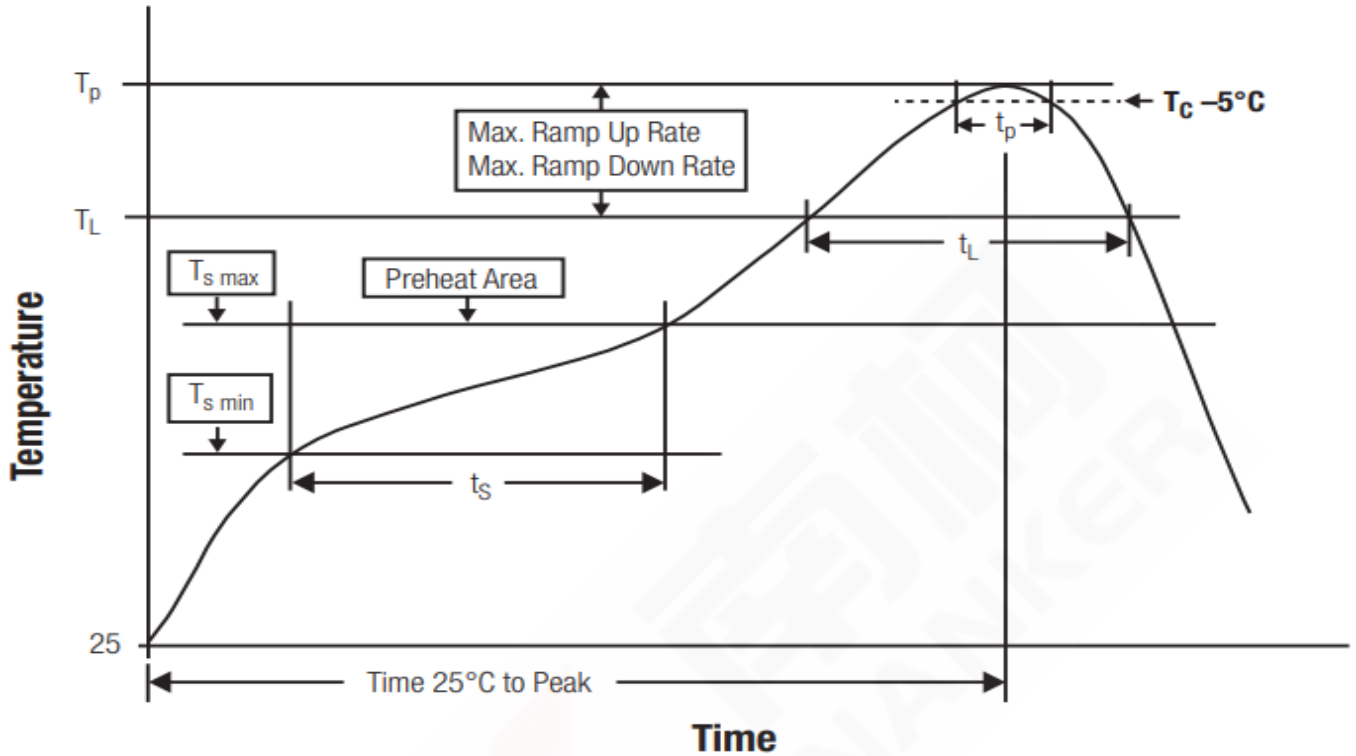
SPI02-4020-100M





回流焊曲线图

Classification Reflow Profile for SMT Components



封装体峰值温度(T_p)分类

Classification Reflow Soldering Profile:

	封装厚度 Package Thickness	封装体积 Package Volume		
		<350 mm ³	350~2,000 mm ³	>2,000 mm ³
无铅装配 PB-Free Assembly	<1.60mm	260°C	260°C	260°C
	1.60~2.50mm	260°C	250°C	245°C
	>2.50mm	260°C	245°C	245°C

- ◆ 回流焊参照标准 IPC/JEDEC J-STD-020D。
Reflow is refer to standard IPC/JEDEC J-STD-020D.