

组合式大电流电感

Shielded Power Inductor (High Current SMD)



特性

Characteristics

磁屏蔽结构，抗电磁干扰(EMI)性能强
Magnetic shielding structure, excellent resistance to electromagnetic interference

组立式设计，结构坚固
Assemblage design, sturdy structure
小体积，大电流，低损耗，低阻抗，寄生电容小
Small volume, high current, low magnetic loss, low ESR, small parasitic capacitance.

温升电流及饱和电流受环境条件影响小
Temperature rise current and saturation current is less influenced by environment.

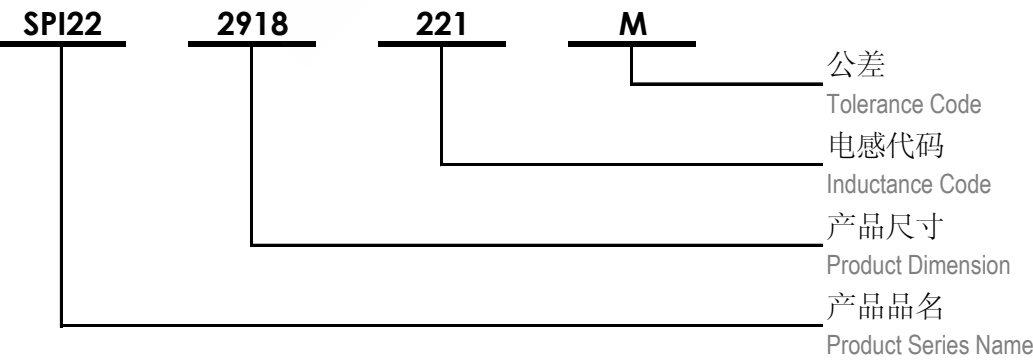
应用

Application

谐振开关电源
DC-DC converters
音频应用的过滤器
VRM modules
高效率纹波电流DC/DC变换器用储能电感
POL converters

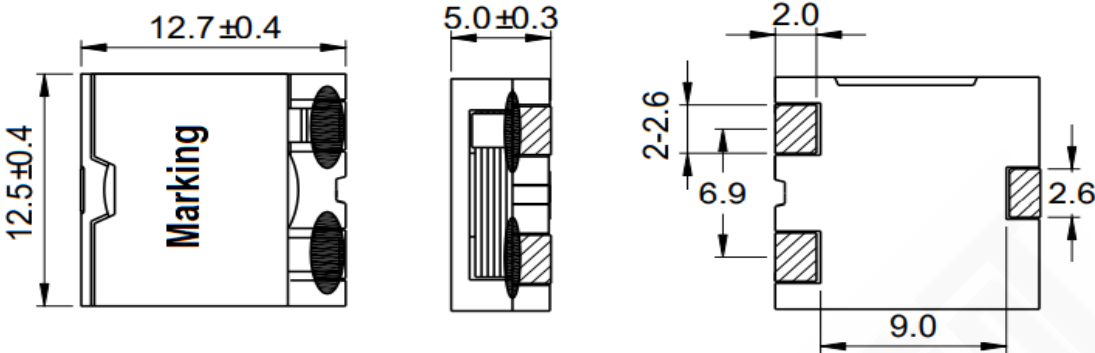
产品品名介绍

Product Number Structure





尺寸
Dimension (mm)



焊盘推荐
Land Pattern Recommended (mm)

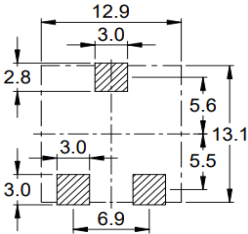
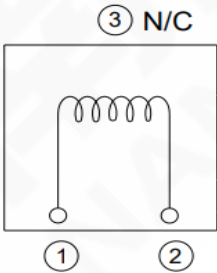


示意图
Schematics



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 DCResistance DCR _{max} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	包装数量 Packaging Qty. pcs
SPI22-1205-R47M	0.47 ±20%	26.50	1.02	31.00	500
SPI22-1205-1R0M	1.00 ±20%	19.00	2.12	21.00	500
SPI22-1205-1R5M	1.50 ±20%	15.00	3.28	18.00	500
SPI22-1205-2R2M	2.20 ±20%	11.50	5.16	16.50	500
SPI22-1205-2R7M	2.70 ±20%	11.50	5.16	14.30	500
SPI22-1205-3R3M	3.30 ±20%	10.00	7.32	14.00	500
SPI22-1205-4R0M	4.00 ±20%	10.00	7.32	12.00	500
SPI22-1205-6R8M	6.80 ±20%	7.50	13.70	9.20	500

测试状态

Test Condition

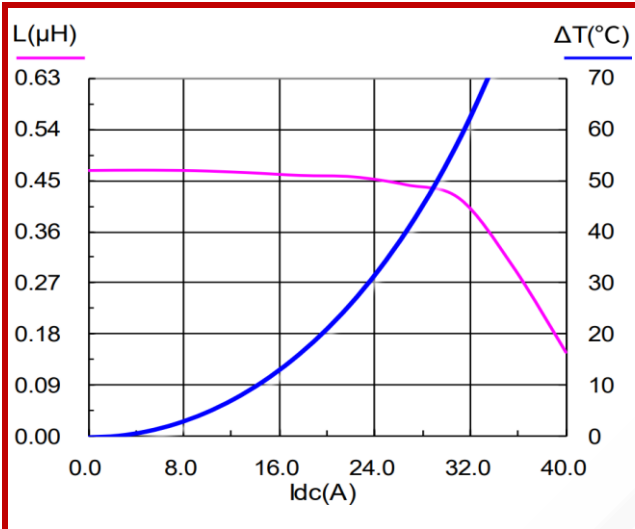
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的20%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 20% of initial value



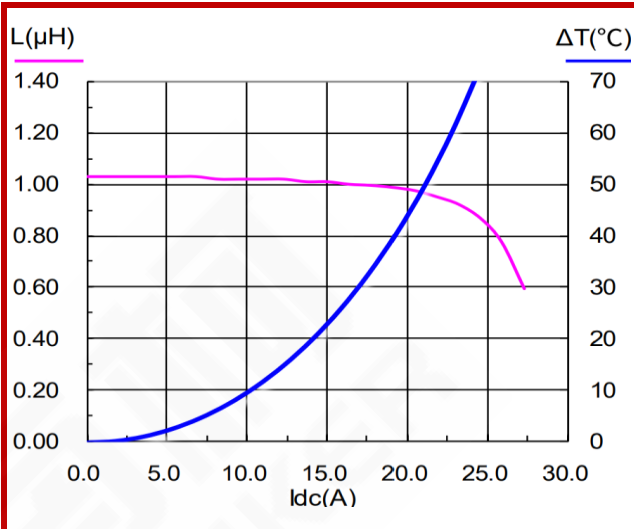
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

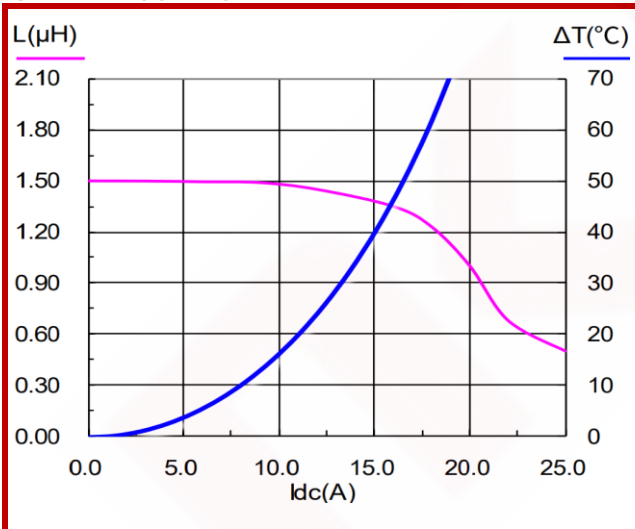
SPI22-1205-R47M



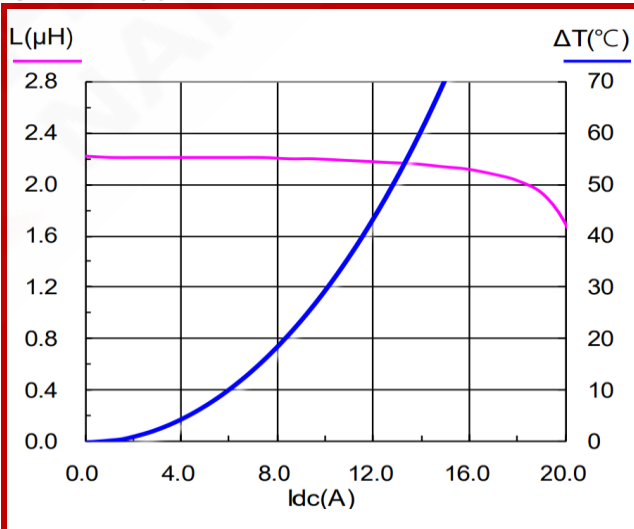
SPI22-1205-1R0M



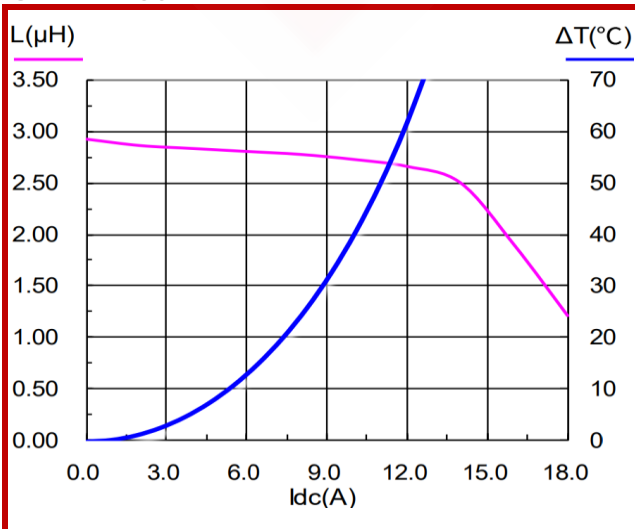
SPI22-1205-1R5M



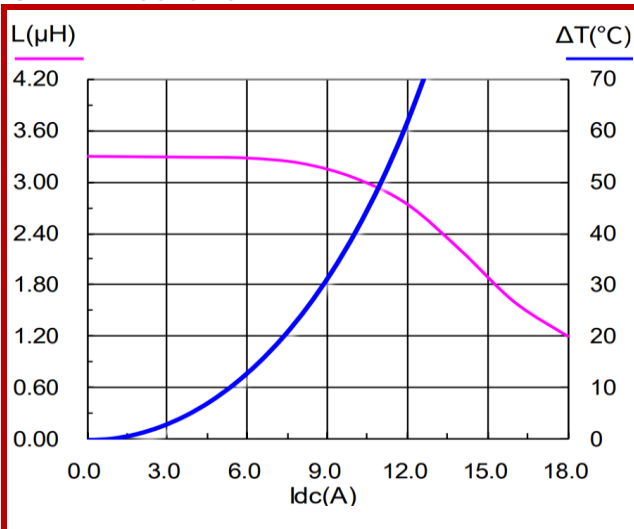
SPI22-1205-2R2M



SPI22-1205-2R7M



SPI22-1205-3R3M

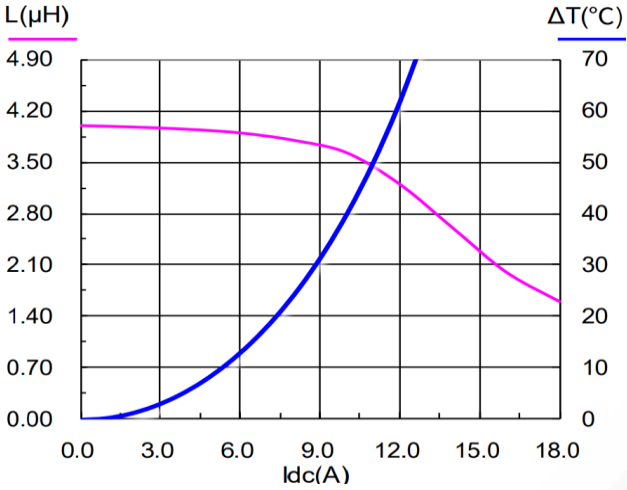




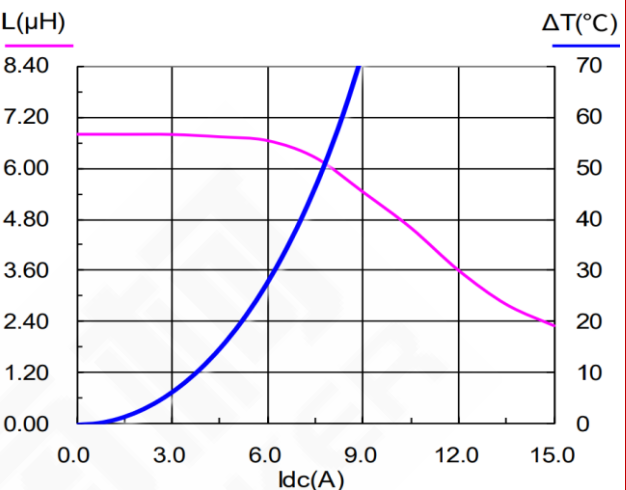
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

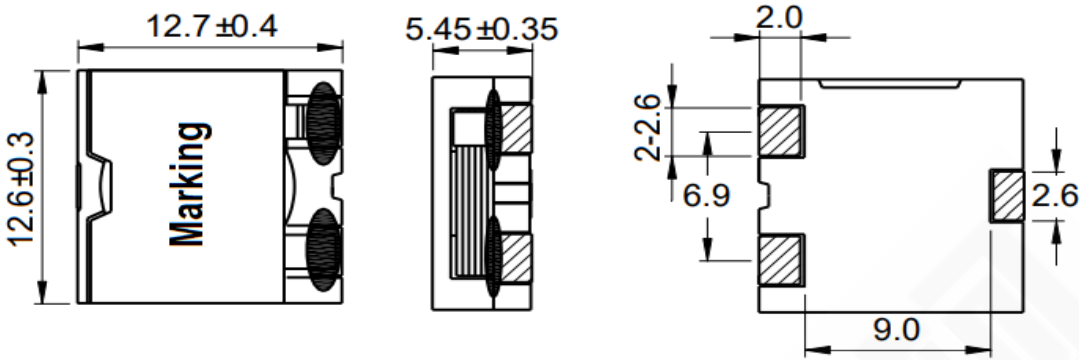
SPI22-1205-4R0M



SPI22-1205-6R8M



 尺寸
Dimension (mm)



 焊盘推荐
Land Pattern Recommended (mm)

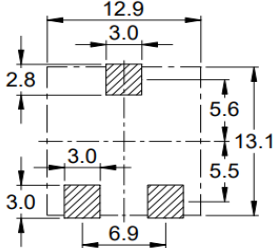
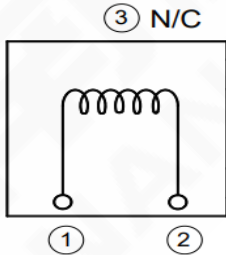


 示意图
Schematics



 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} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1255-R33M	0.33 ±20%	16.90	0.98	41.00	400
SPI22-1255-R65M	0.65 ±20%	16.90	0.98	27.00	400
SPI22-1255-1R0M	1.00 ±20%	13.00	3.10	33.00	400
SPI22-1255-1R8M	1.80 ±20%	13.00	3.10	19.00	400
SPI22-1255-2R7M	2.70 ±20%	13.00	3.10	13.00	400
SPI22-1255-4R0M	4.00 ±20%	9.40	6.27	12.00	400
SPI22-1255-4R7M	4.70 ±20%	9.40	6.27	11.00	400
SPI22-1255-6R0M	6.00 ±20%	9.40	6.27	9.00	400
SPI22-1255-8R0M	8.00 ±20%	7.60	10.30	8.50	400
SPI22-1255-100M	10.00 ±20%	7.60	10.30	7.00	400

测试状态

Test Condition

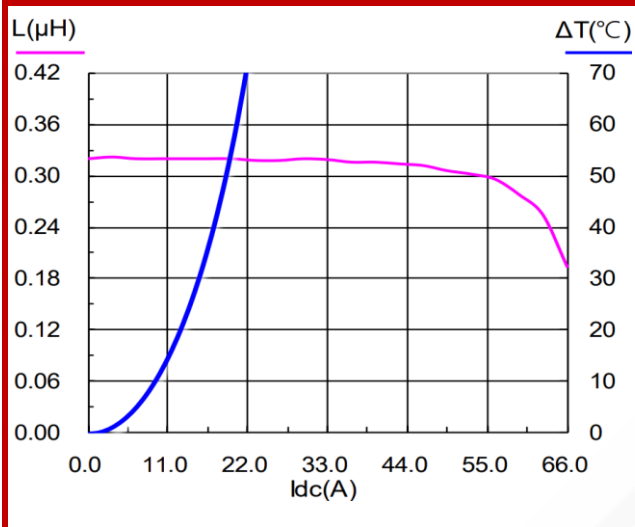
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



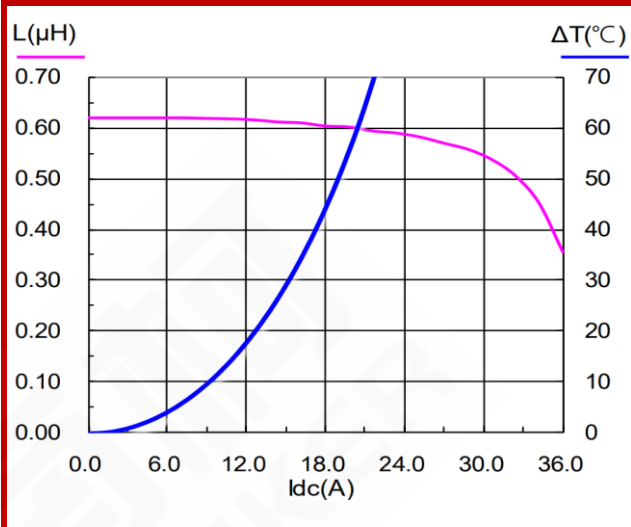
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

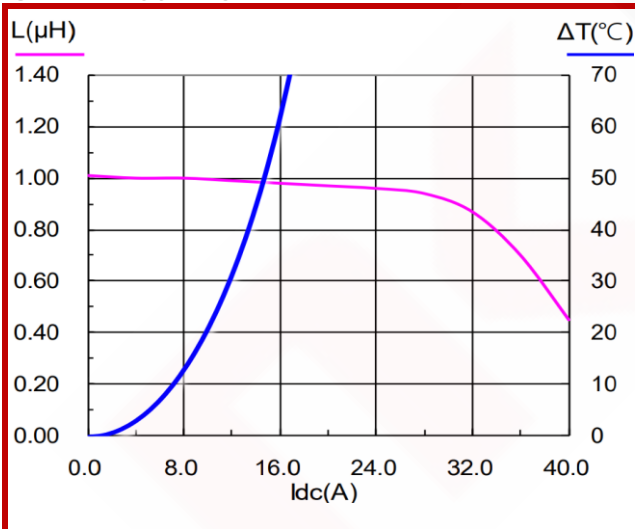
SPI22-1255-R33M



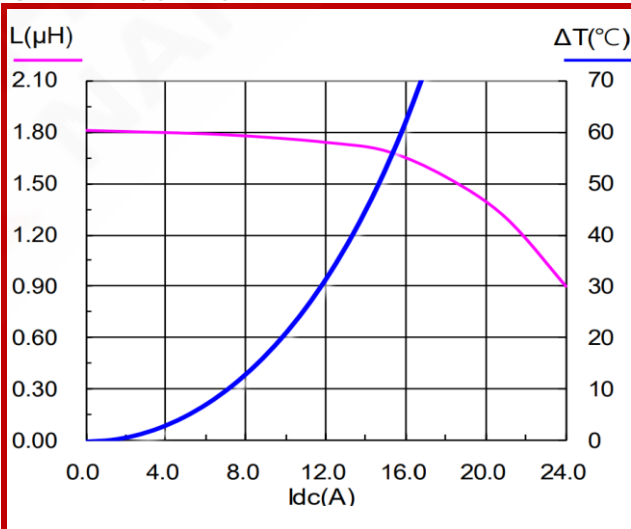
SPI22-1255-R65M



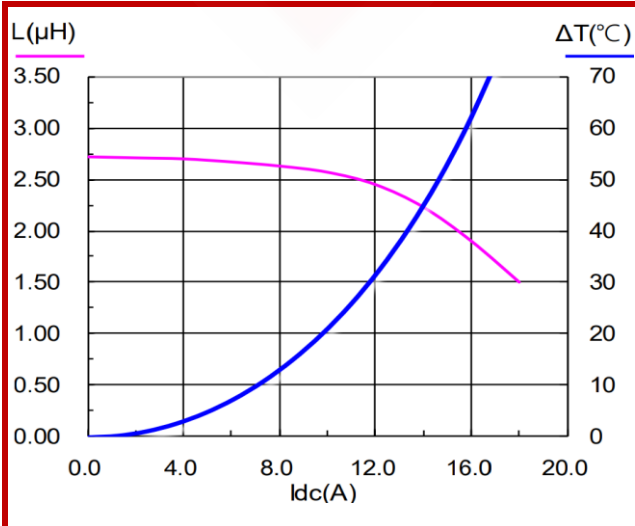
SPI22-1255-1R0M



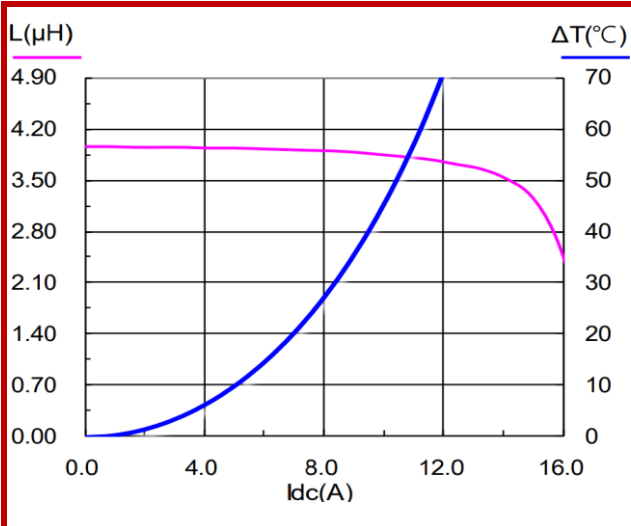
SPI22-1255-1R8M



SPI22-1255-2R7M



SPI22-1255-4R0M

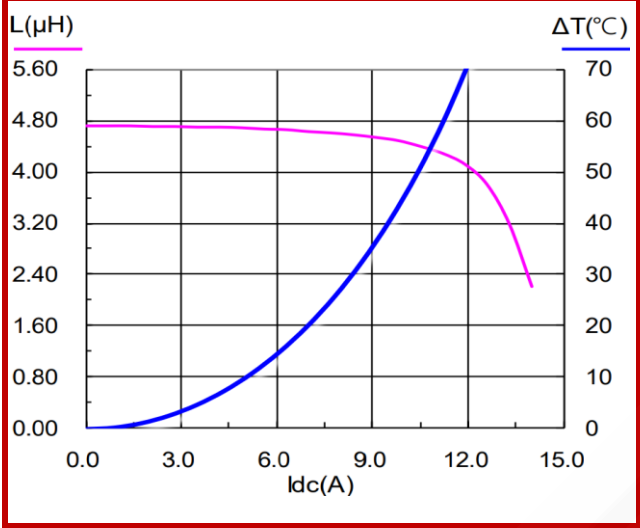




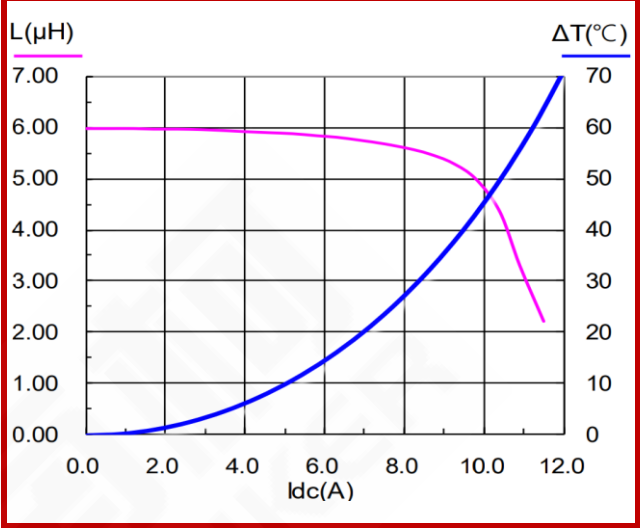
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

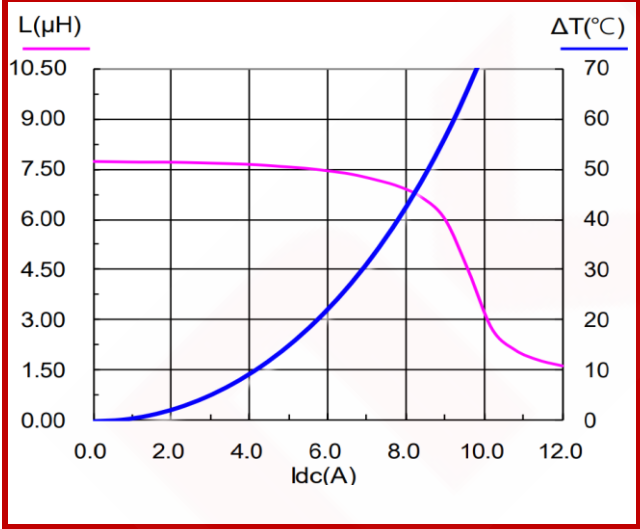
SPI22-1255-4R7M



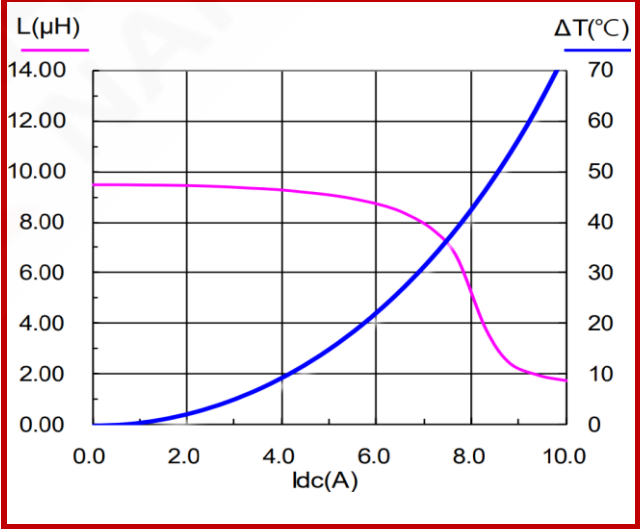
SPI22-1255-6R0M



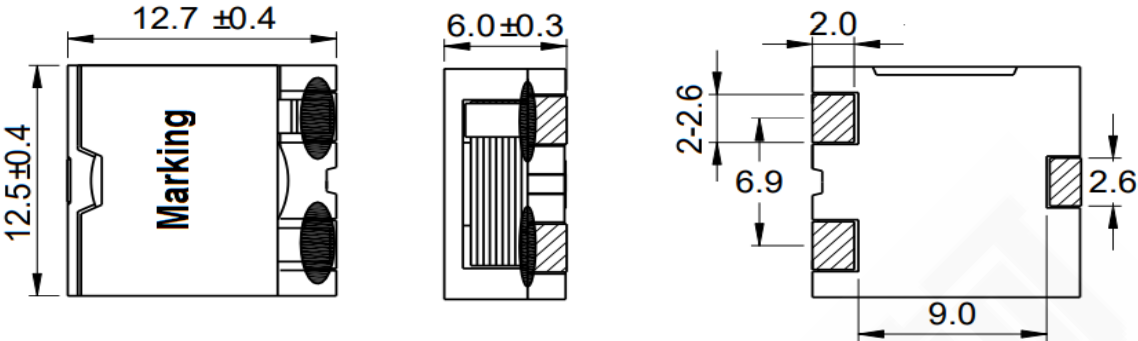
SPI22-1255-8R0M



SPI22-1255-100M



 尺寸
Dimension (mm)



 焊盘推荐
Land Pattern Recommended (mm)

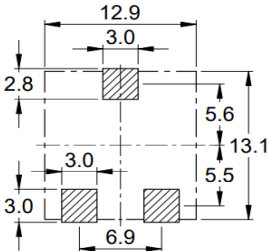
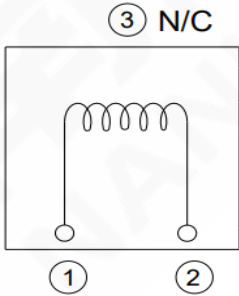


 示意图
Schematics



 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} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1206-R80M	0.80 ±20%	20.00	2.00	29.00	400
SPI22-1206-1R0M	1.00 ±20%	20.00	2.00	28.00	400
SPI22-1206-1R2M	1.20 ±20%	19.00	2.10	21.00	400
SPI22-1206-2R2M	2.20 ±20%	17.00	2.60	19.00	400
SPI22-1206-4R0M	4.00 ±20%	11.50	6.30	13.00	400
SPI22-1206-4R7M	4.70 ±20%	9.50	7.80	11.50	400
SPI22-1206-6R8M	6.80 ±20%	8.20	10.20	10.50	400
SPI22-1206-100M	10.00 ±20%	8.00	13.50	7.00	400
SPI22-1206-170M	17.00 ±20%	5.50	23.50	5.00	400

测试状态
Test Condition

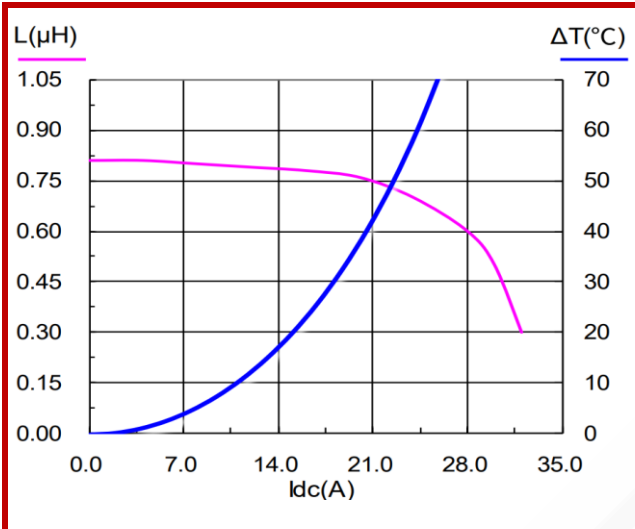
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



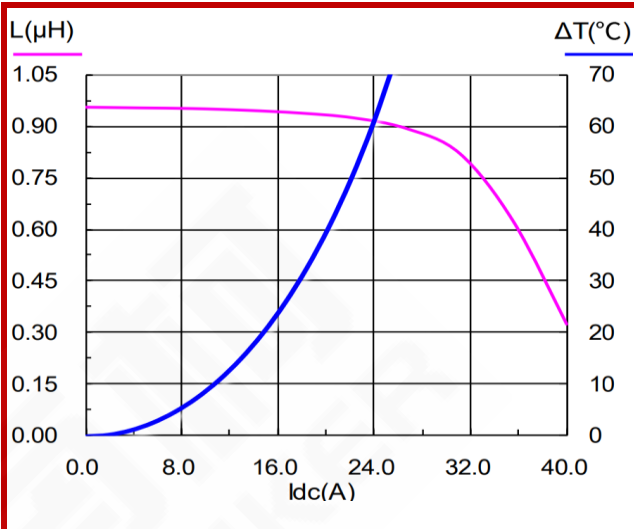
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

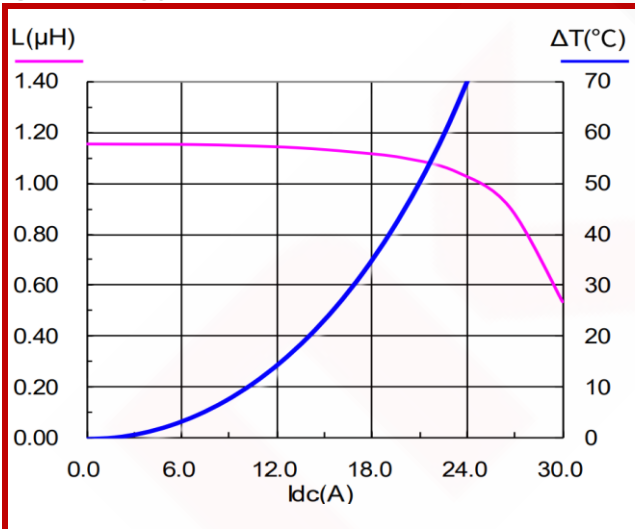
SPI22-1206-R80M



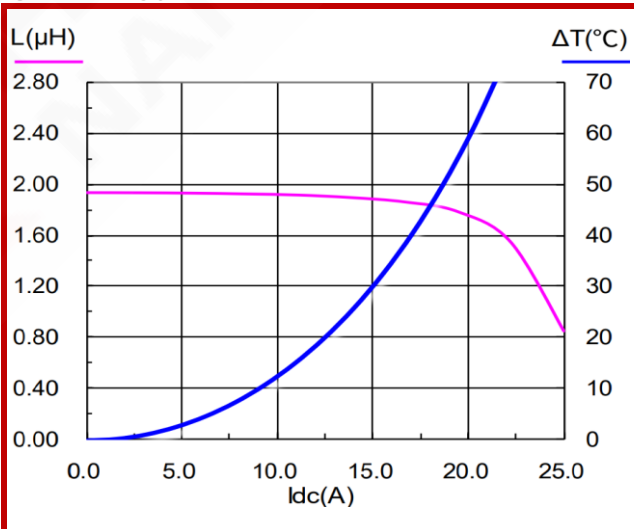
SPI22-1206-1R0M



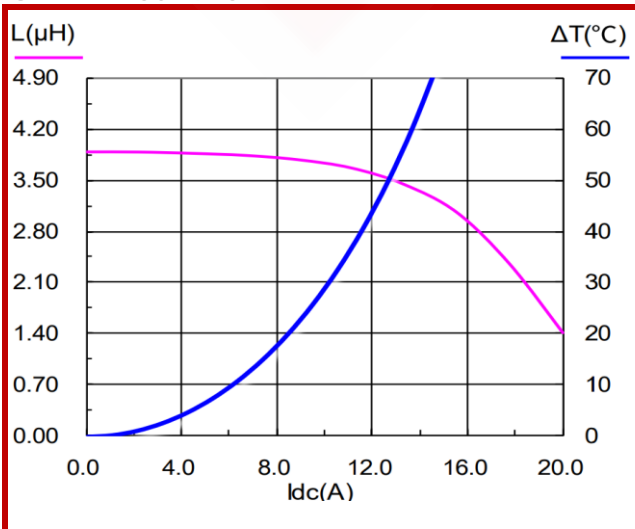
SPI22-1206-1R2M



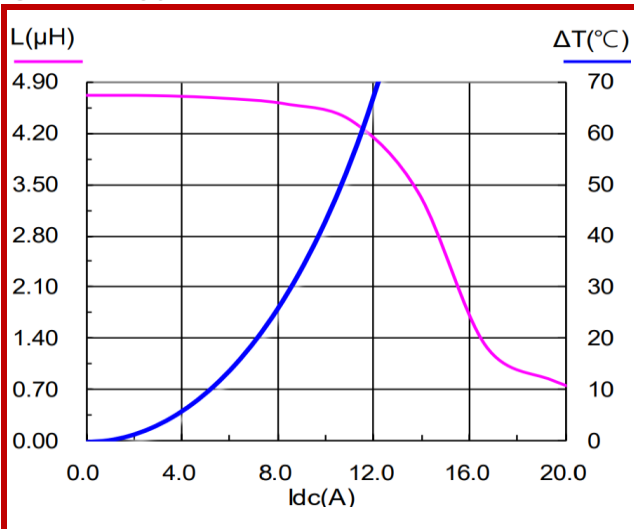
SPI22-1206-2R2M



SPI22-1206-4R0M



SPI22-1206-4R7M

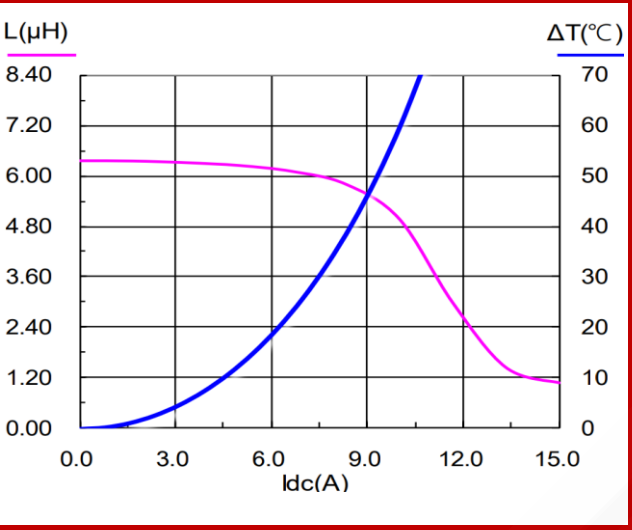




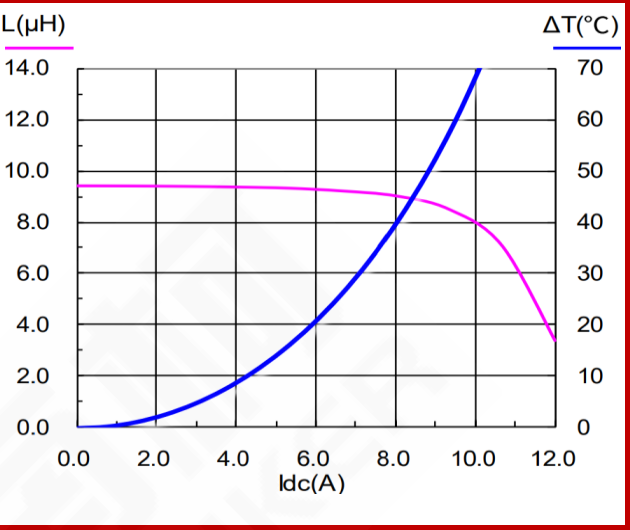
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

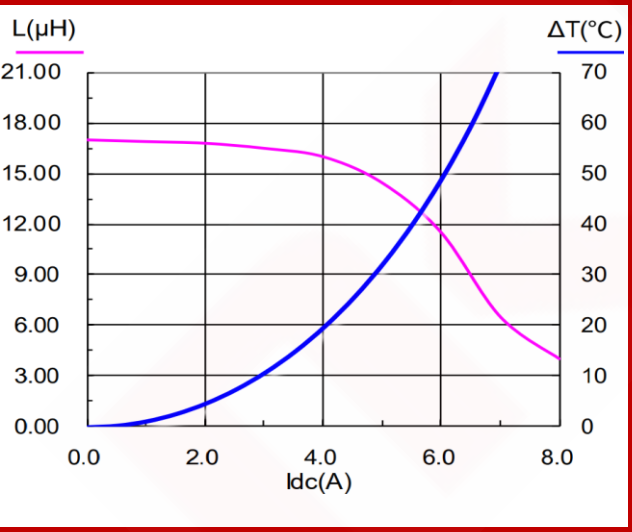
SPI22-1206-6R8M



SPI22-1206-100M

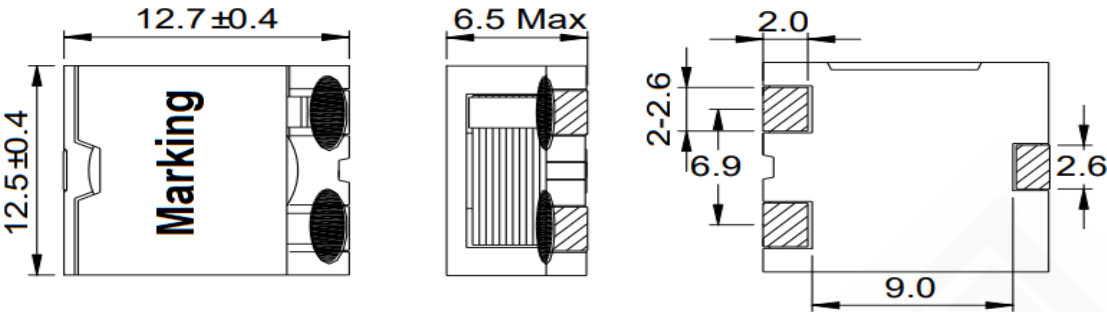


SPI22-1206-170M



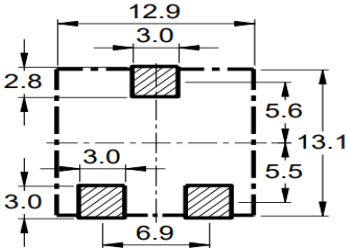
尺寸

Dimension (mm)



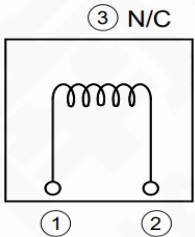
焊盘推荐

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} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1207-R50M	0.50 ±20%	29.50	1.04	35.00	400
SPI22-1207-1R5M	1.50 ±20%	17.50	2.71	26.00	400
SPI22-1207-2R2M	2.20 ±20%	15.50	3.53	22.00	400
SPI22-1207-3R3M	3.30 ±20%	12.00	5.40	16.50	400
SPI22-1207-4R0M	4.00 ±20%	12.00	5.40	13.50	400
SPI22-1207-4R7M	4.70 ±20%	10.50	7.50	13.50	400
SPI22-1207-5R6M	5.60 ±20%	10.50	7.50	11.50	400
SPI22-1207-6R8M	6.80 ±20%	10.00	9.50	10.50	400
SPI22-1207-8R2M	8.20 ±20%	8.20	11.40	10.00	400
SPI22-1207-101M	10.00 ±20%	7.10	15.00	9.30	400
SPI22-1207-171M	17.00 ±20%	6.00	16.50	5.00	400
SPI22-1207-251M	25.00 ±20%	5.80	20.00	3.80	400
SPI22-1207-421M	42.00 ±20%	5.30	28.20	2.40	400

测试状态

Test Condition

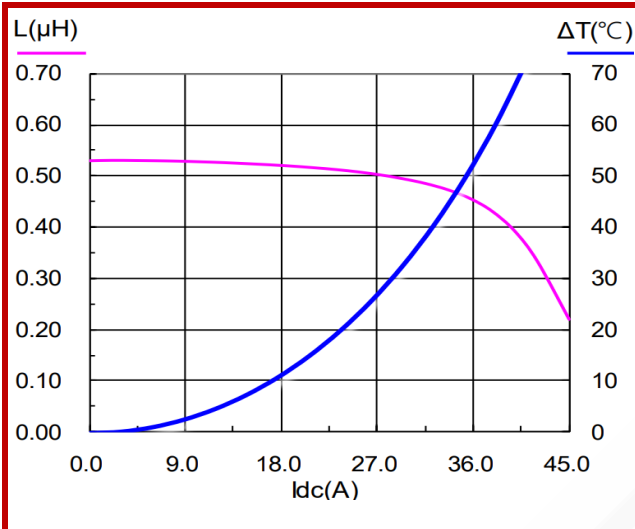
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的20%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 20% of initial value



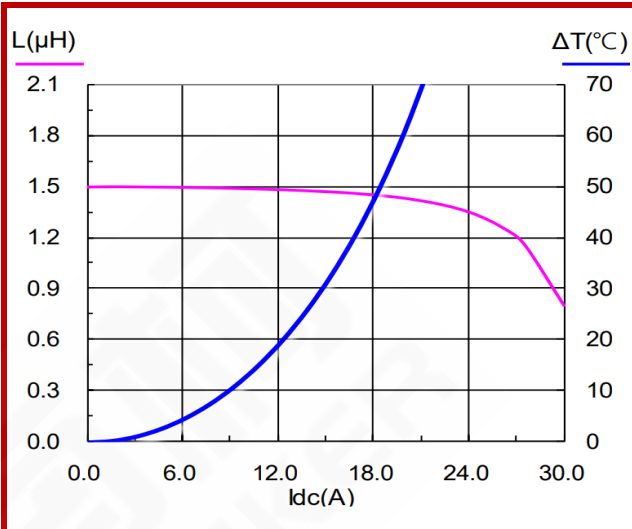
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

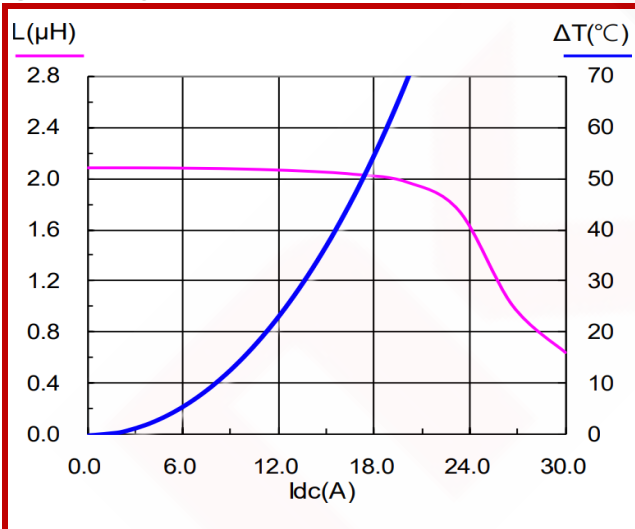
SPI22-1207-R50M



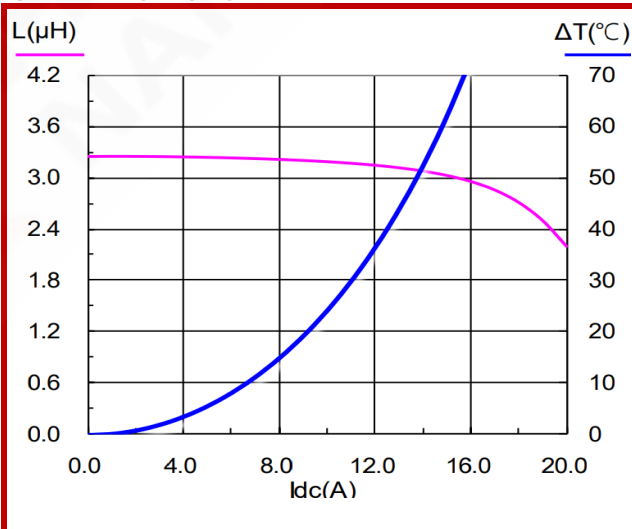
SPI22-1207-1R5M



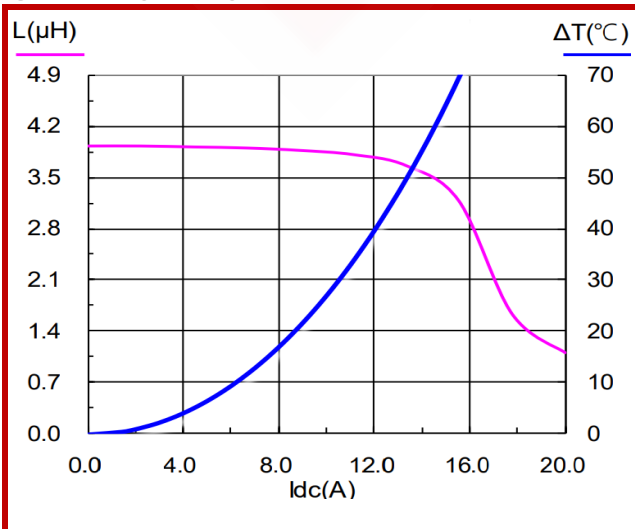
SPI22-1207-2R2M



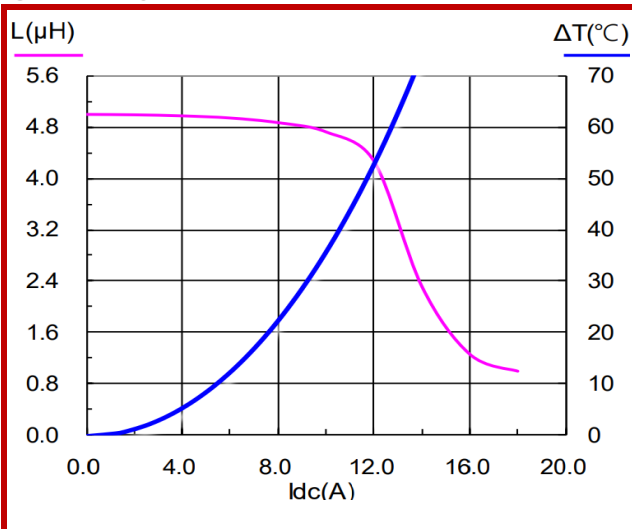
SPI22-1207-3R3M



SPI22-1207-4R0M



SPI22-1207-4R7M

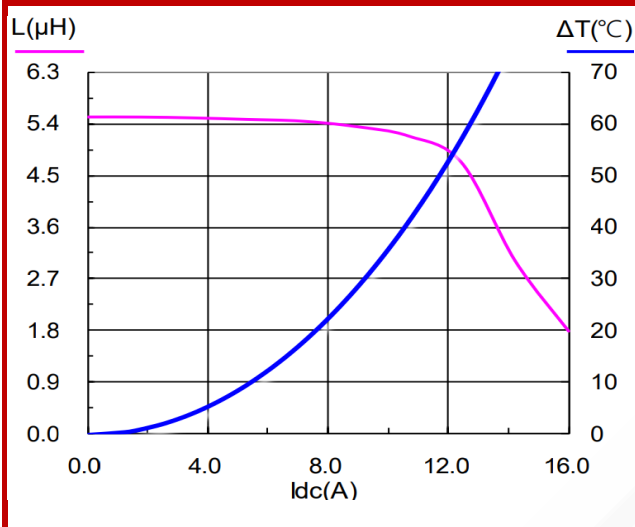




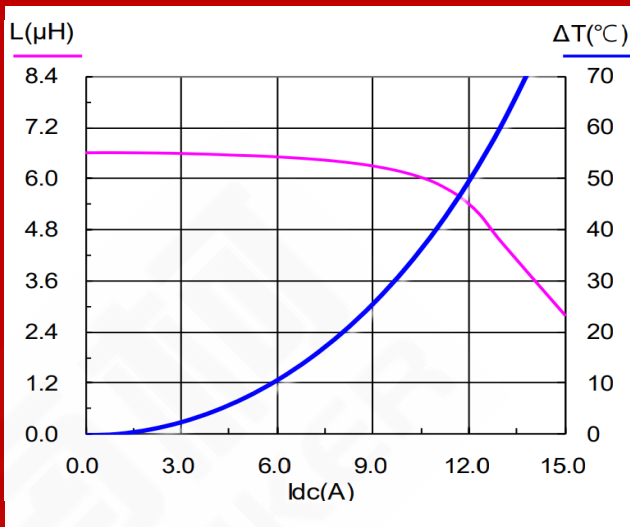
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

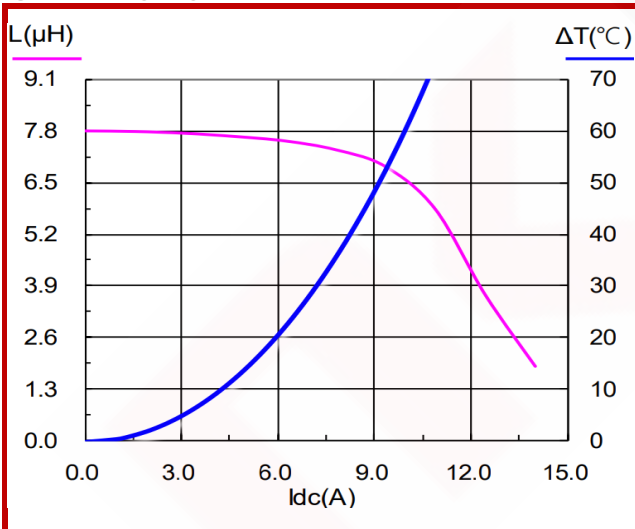
SPI22-1207-5R6M



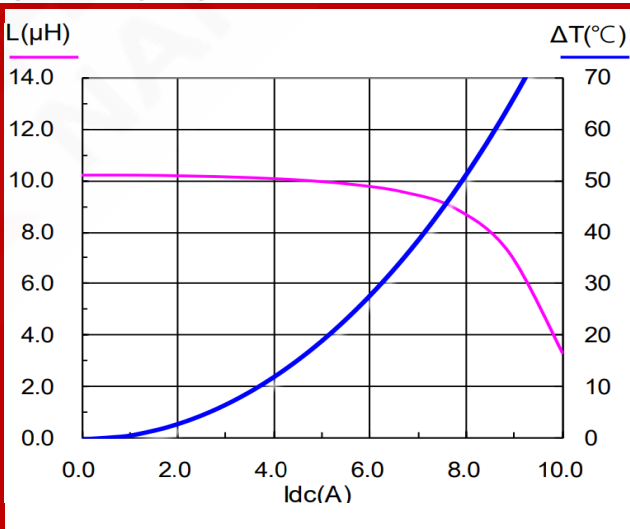
SPI22-1207-6R8M



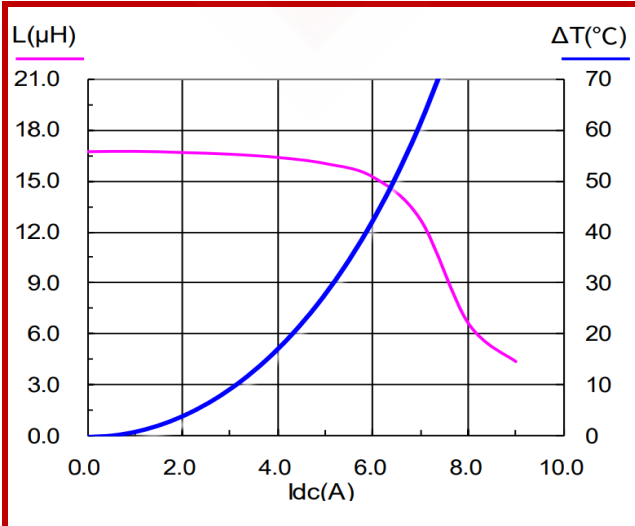
SPI22-1207-8R2M



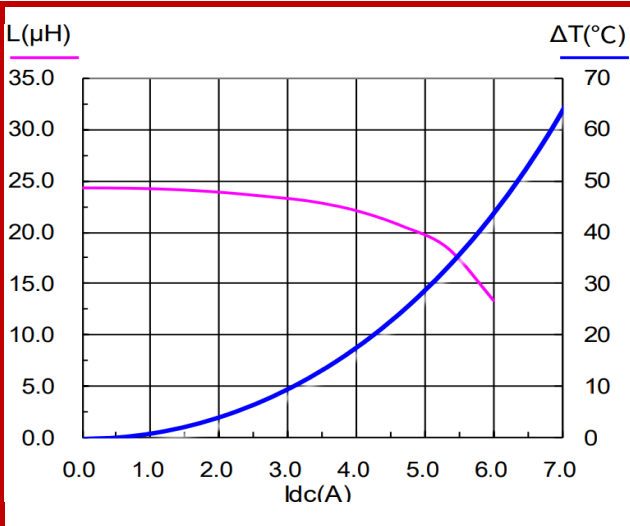
SPI22-1207-101M



SPI22-1207-171M



SPI22-1207-251M

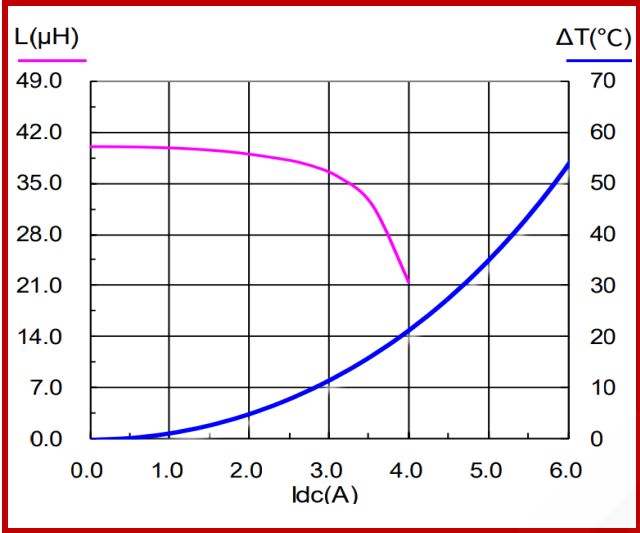




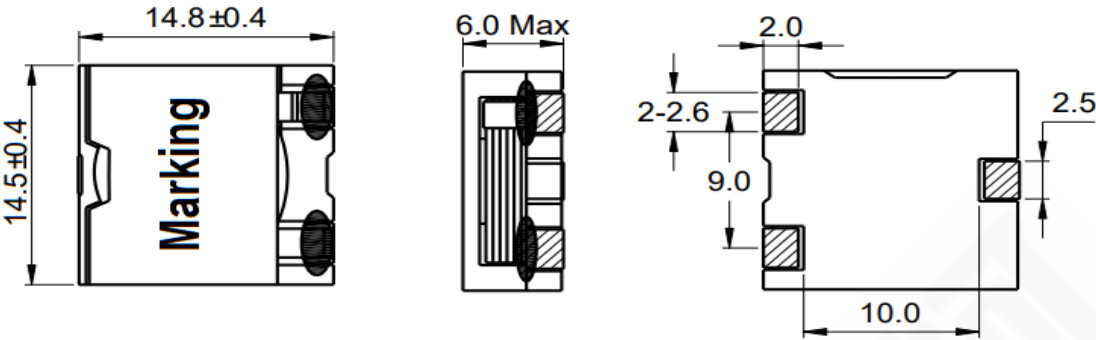
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI22-1207-421M



 尺寸
Dimension (mm)



 焊盘推荐
Land Pattern Recommended (mm)

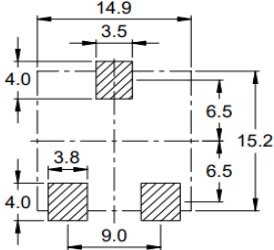
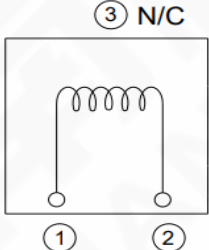


 示意图
Schematics



 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} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1406-R56M	0.56 ±20%	23.00	1.68	46.00	300
SPI22-1406-R68M	0.68 ±20%	23.00	1.68	40.00	300
SPI22-1406-1R2M	1.20 ±20%	19.50	3.00	35.00	300
SPI22-1406-1R5M	1.50 ±20%	19.50	3.00	27.50	300
SPI22-1406-2R2M	2.20 ±20%	15.00	4.56	24.50	300
SPI22-1406-2R7M	2.70 ±20%	15.00	4.56	20.50	300
SPI22-1406-3R5M	3.50 ±20%	12.00	6.80	18.70	300
SPI22-1406-4R2M	4.20 ±20%	12.00	6.80	17.00	300
SPI22-1406-5R0M	5.00 ±20%	9.50	10.10	15.20	300
SPI22-1406-6R1M	6.10 ±20%	9.50	10.10	13.50	300
SPI22-1406-8R2M	8.20 ±20%	8.20	13.80	11.00	300
SPI22-1406-100M	10.00 ±20%	8.20	13.80	9.50	300

测试状态
Test Condition

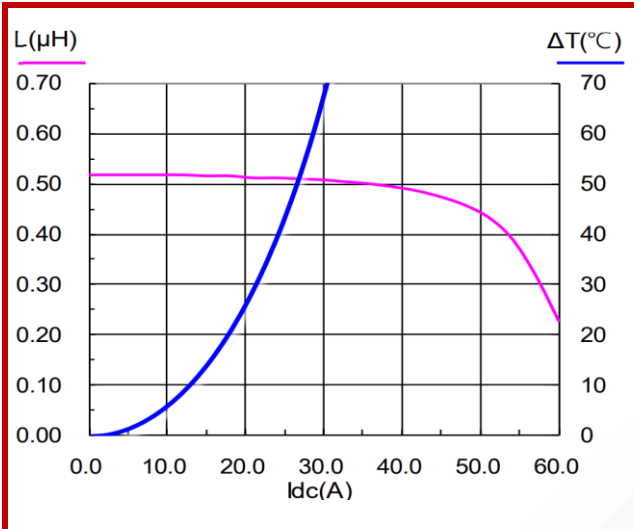
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



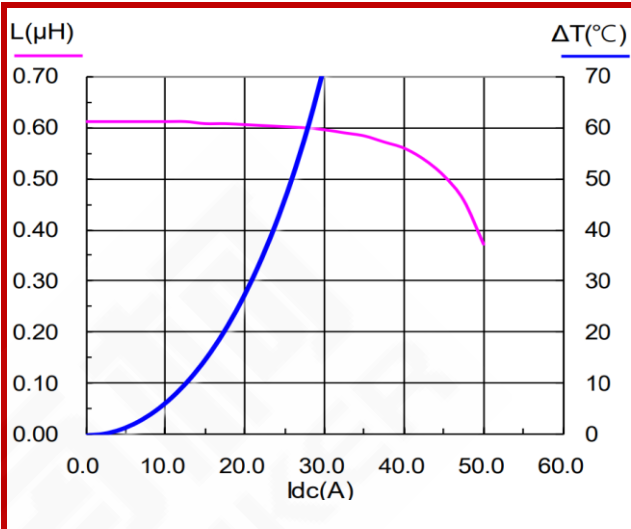
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

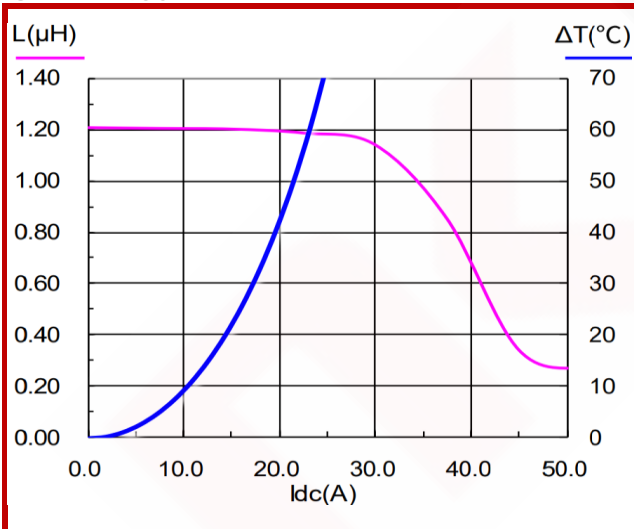
SPI22-1406-R56M



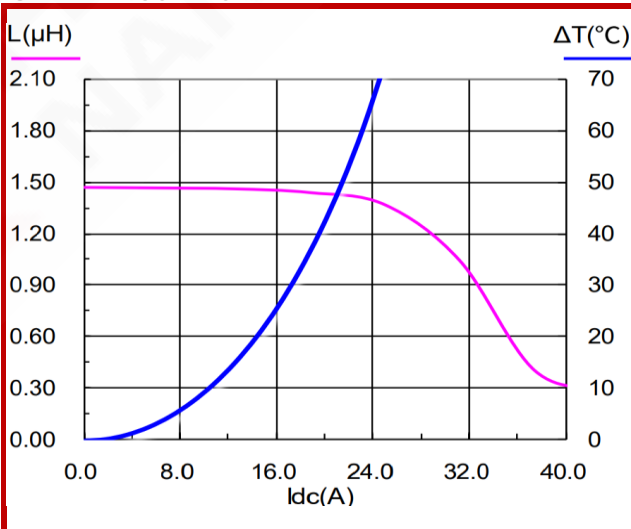
SPI22-1406-R68M



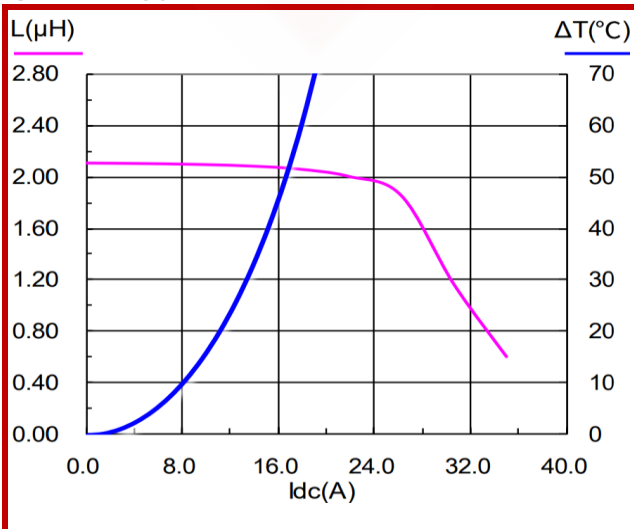
SPI22-1406-1R2M



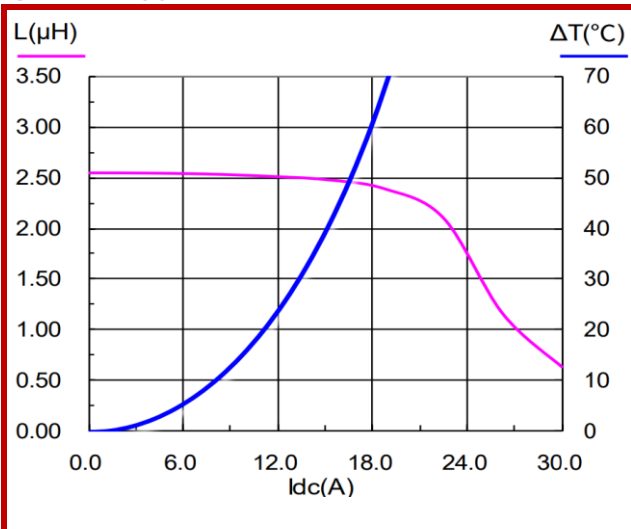
SPI22-1406-1R5M



SPI22-1406-2R2M



SPI22-1406-2R7M

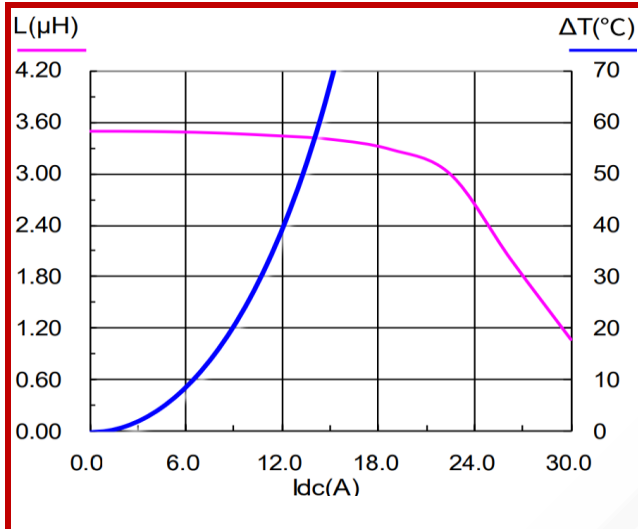




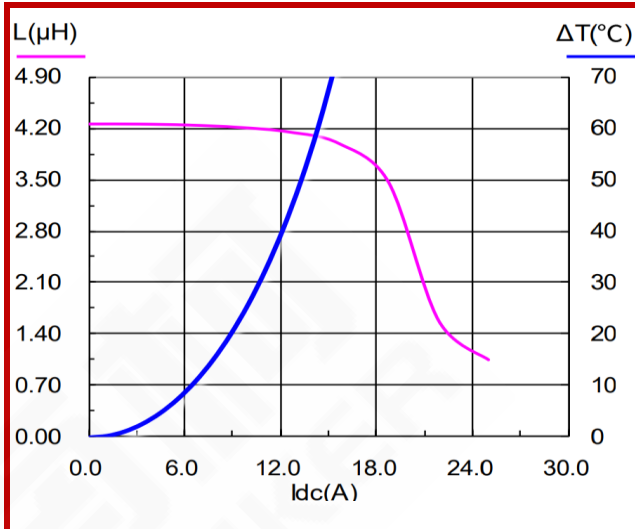
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

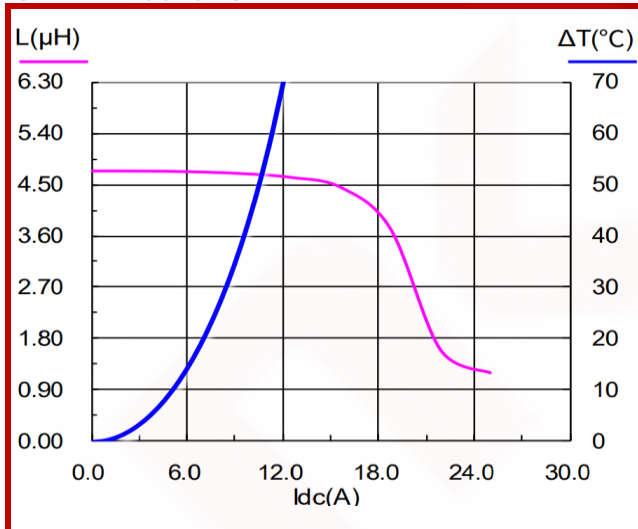
SPI22-1406-3R5M



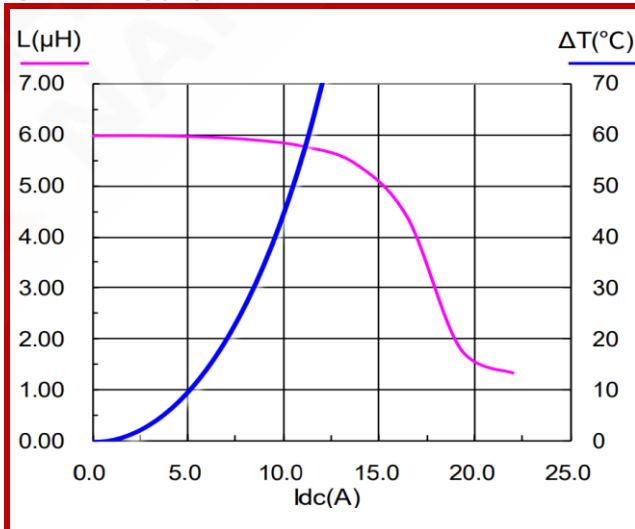
SPI22-1406-4R2M



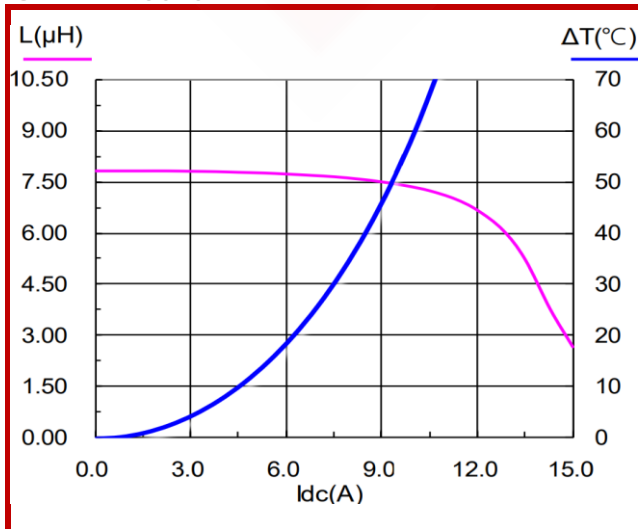
SPI22-1406-5R0M



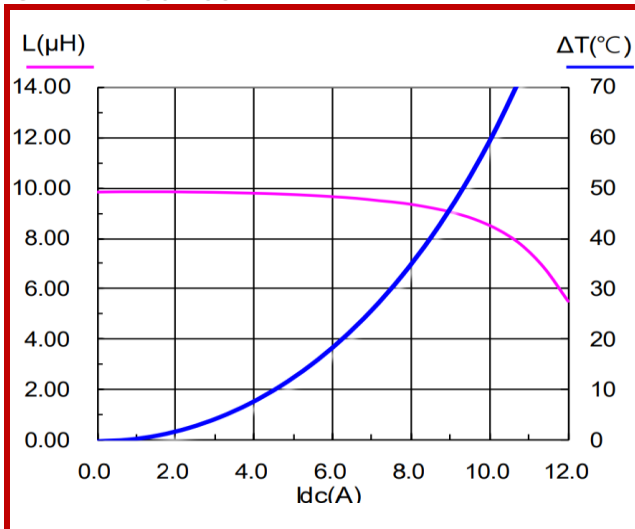
SPI22-1406-6R1M



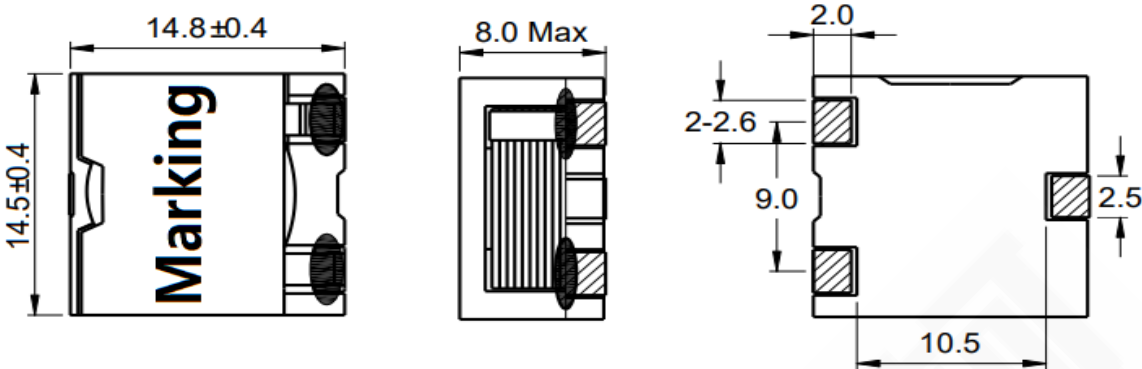
SPI22-1406-8R2M



SPI22-1406-100M



 尺寸
Dimension (mm)



 焊盘推荐
Land Pattern Recommended (mm)

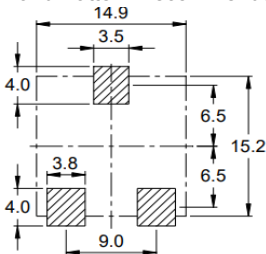
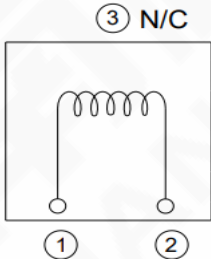


 示意图
Schematics



 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 DCResistance DCR _{max} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1408-R30M	0.30 ±20%	23.00	1.18	87.60	250
SPI22-1408-R70M	0.70 ±20%	21.50	1.46	58.00	250
SPI22-1408-1R2M	1.20 ±20%	20.00	2.02	44.70	250
SPI22-1408-1R8M	1.80 ±20%	17.50	3.23	37.00	250
SPI22-1408-2R6M	2.60 ±20%	16.00	4.97	30.50	250
SPI22-1408-3R5M	3.50 ±20%	12.50	6.03	26.00	250
SPI22-1408-4R7M	4.70 ±20%	11.00	7.80	22.00	250
SPI22-1408-5R9M	5.90 ±20%	10.00	9.85	20.50	250
SPI22-1408-7R3M	7.30 ±20%	8.50	13.30	18.30	250

测试状态
Test Condition

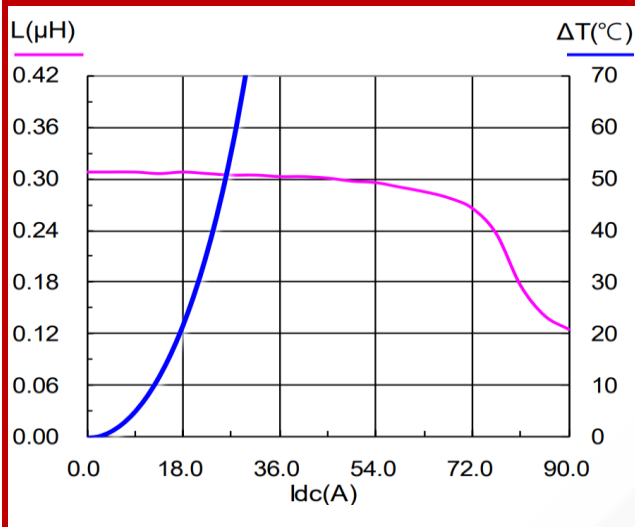
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



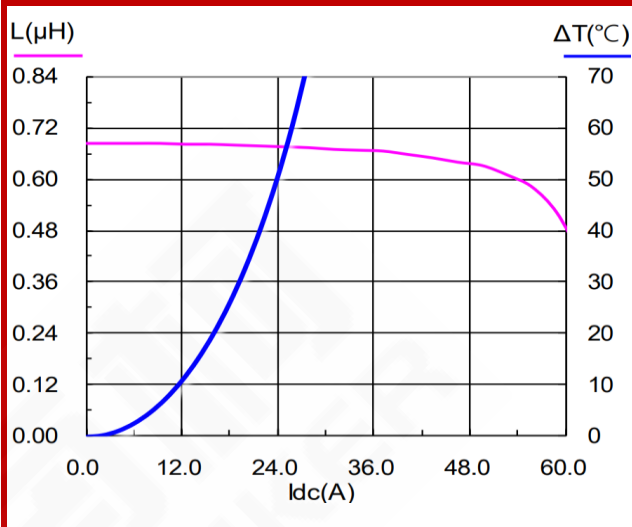
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

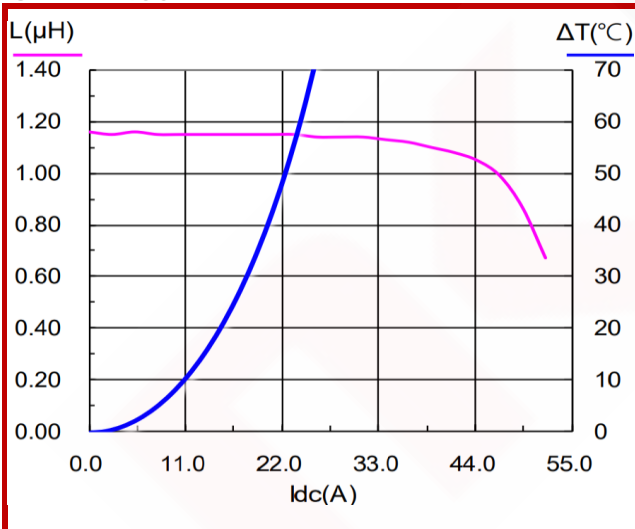
SPI22-1408-R30M



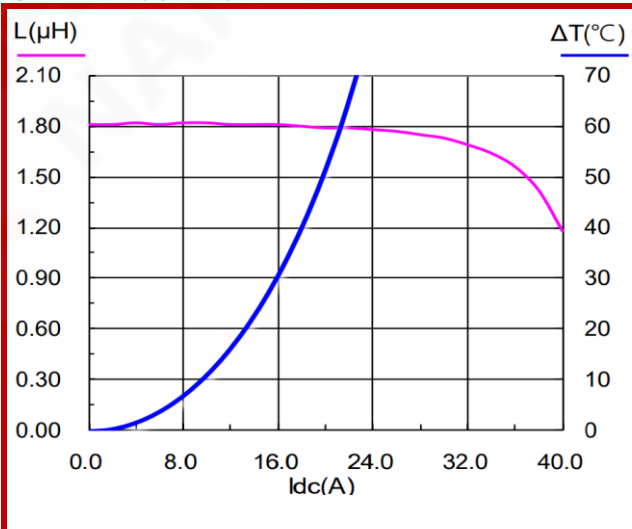
SPI22-1408-R70M



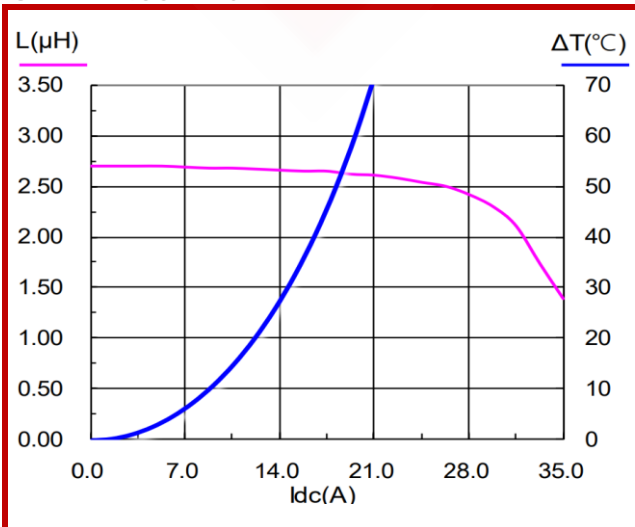
SPI22-1408-1R2M



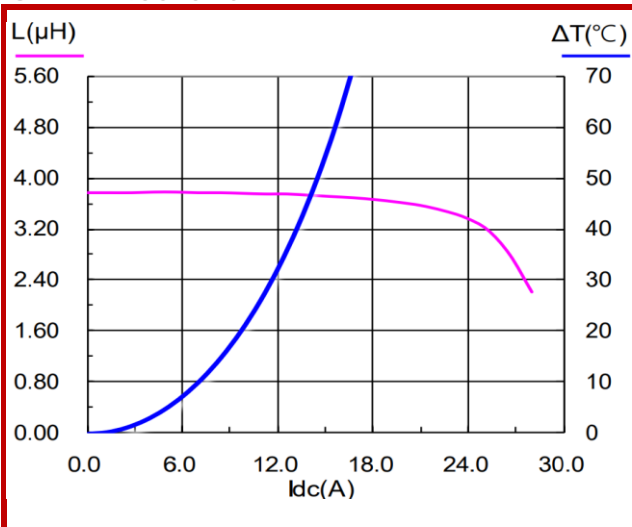
SPI22-1408-1R8M



SPI22-1408-2R6M



SPI22-1408-3R5M

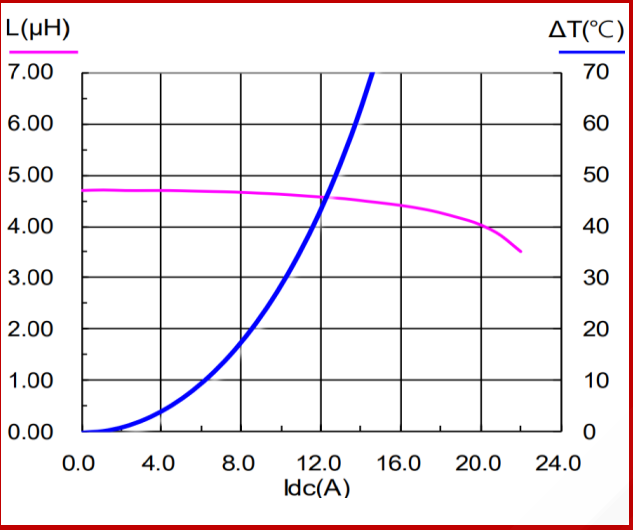




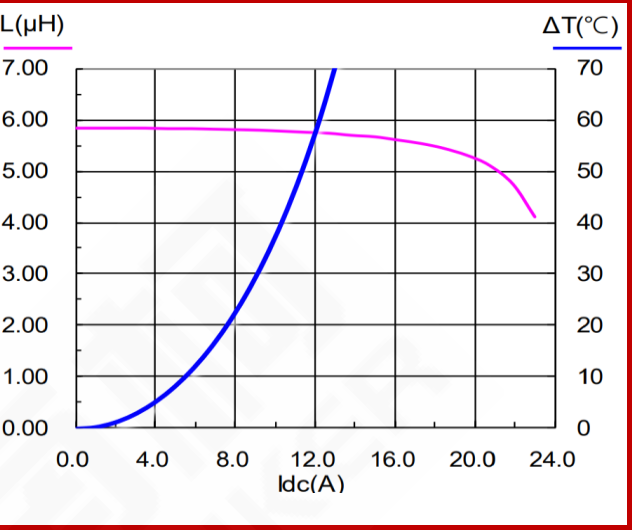
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

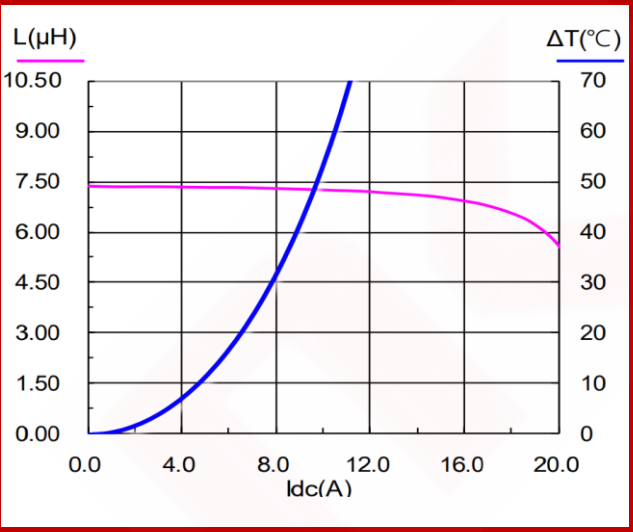
SPI22-1408-4R7M



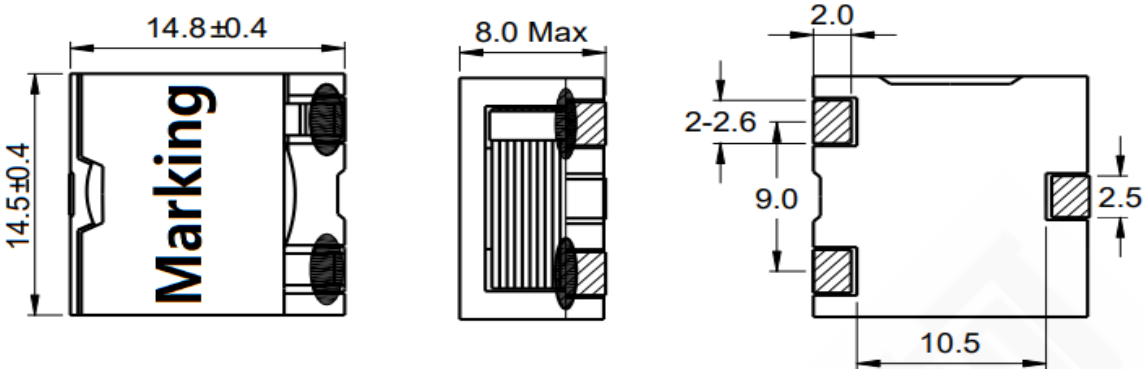
SPI22-1408-5R9M



SPI22-1408-7R3M



 尺寸
Dimension (mm)



 焊盘推荐
Land Pattern Recommended (mm)

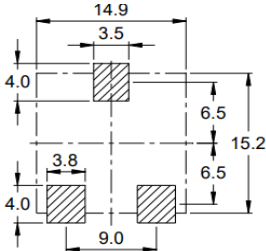
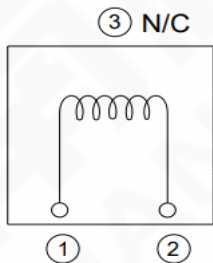


 示意图
Schematics



 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 DCResistance DCR _{max} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1408A-R50M	0.50 ±20%	23.00	1.18	59.50	250
SPI22-1408A-1R1M	1.10 ±20%	21.50	1.46	33.00	250
SPI22-1408A-2R0M	2.00 ±20%	20.00	2.02	24.50	250
SPI22-1408A-3R1M	3.10 ±20%	17.50	3.23	20.00	250
SPI22-1408A-4R5M	4.50 ±20%	16.00	4.97	17.00	250
SPI22-1408A-6R1M	6.10 ±20%	12.50	6.03	14.50	250
SPI22-1408A-8R0M	8.00 ±20%	11.00	7.80	12.50	250
SPI22-1408A-101M	10.00 ±20%	10.00	9.85	11.50	250
SPI22-1408A-121M	12.00 ±20%	8.50	13.30	10.00	250

测试状态
Test Condition

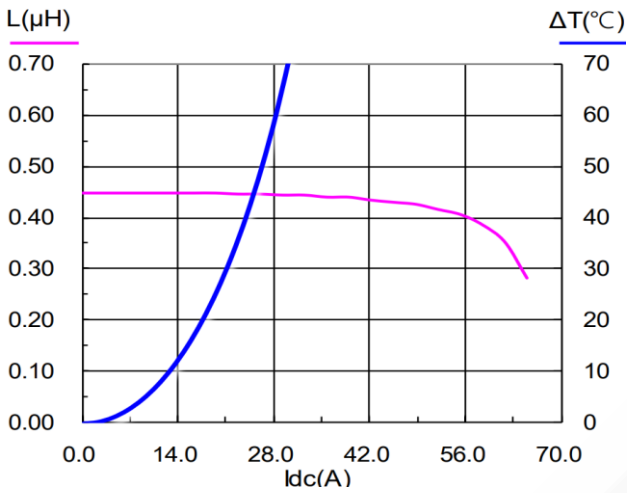
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



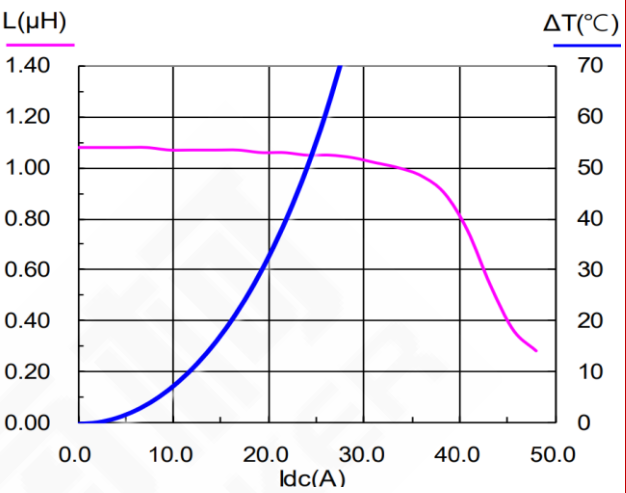
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

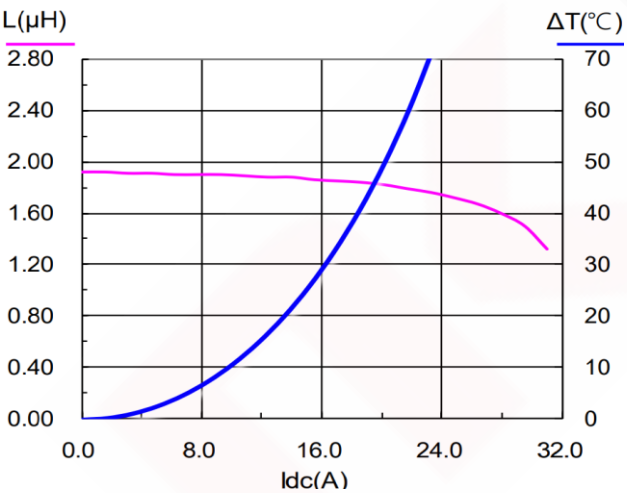
SPI22-1408A-R50M



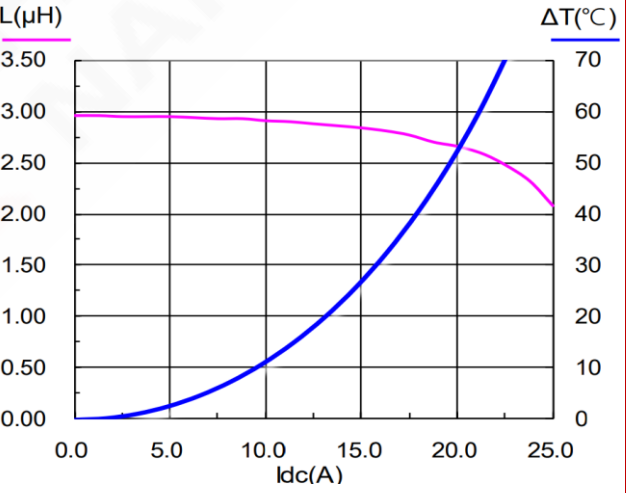
SPI22-1408A-1R1M



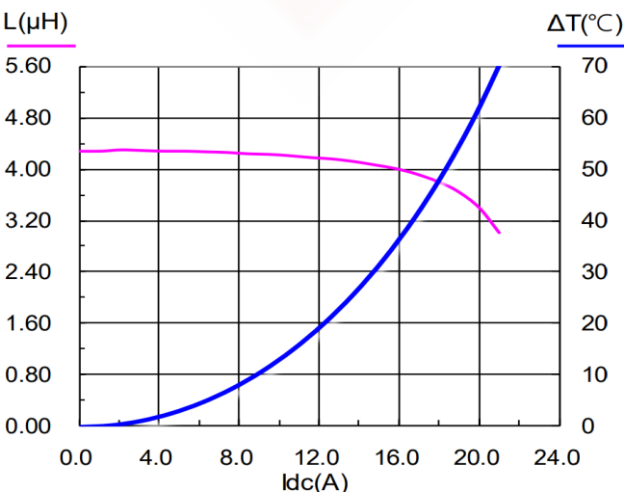
SPI22-1408A-2R0M



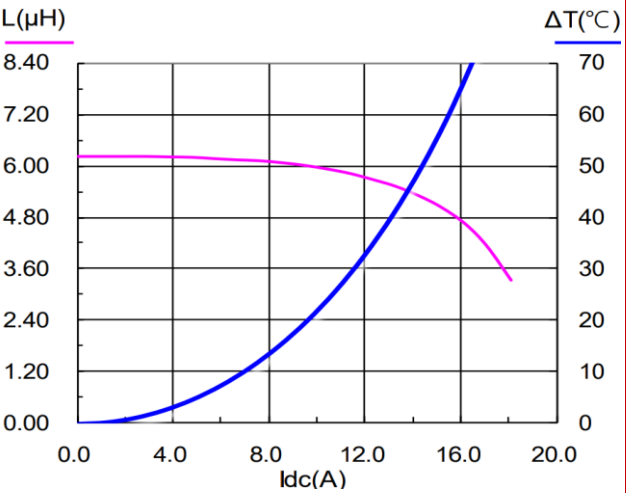
SPI22-1408A-3R1M



SPI22-1408A-4R5M



SPI22-1408A-6R1M

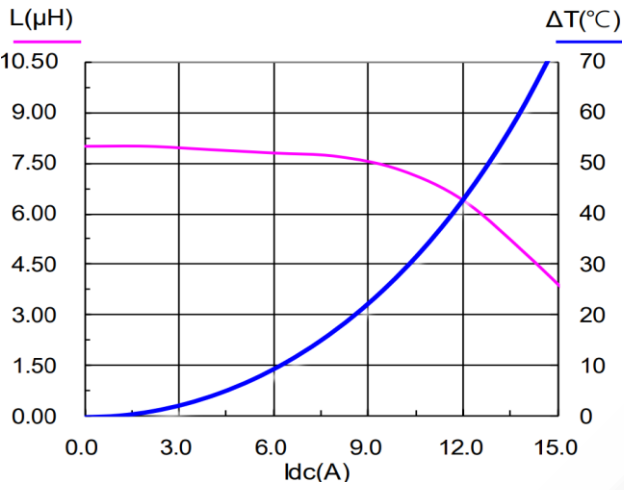




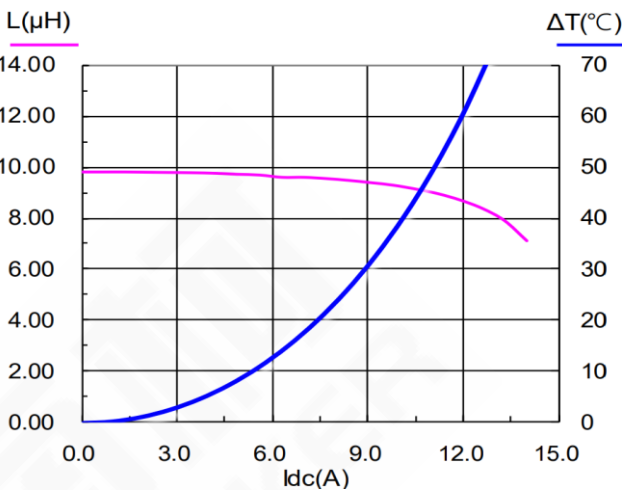
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

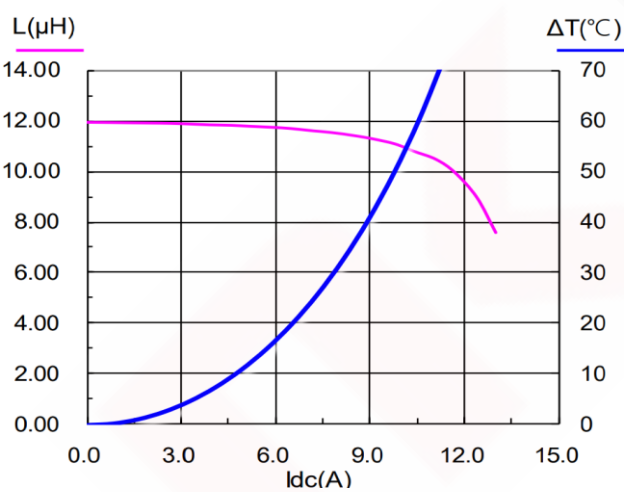
SPI22-1408A-8R0M



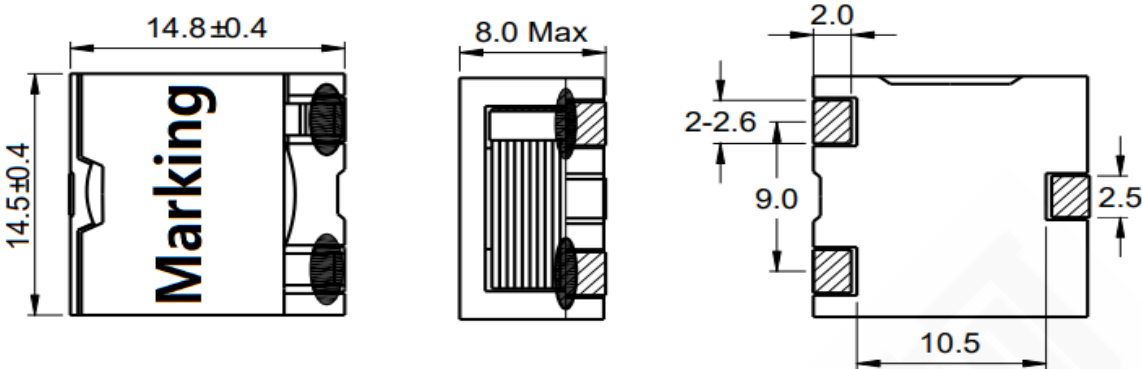
SPI22-1408A-101M



SPI22-1408A-121M



 尺寸
Dimension (mm)



 焊盘推荐
Land Pattern Recommended (mm)

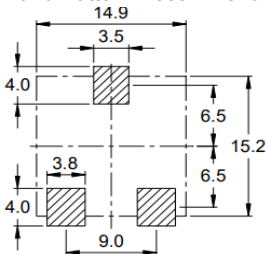
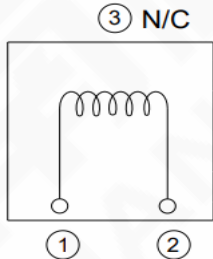


 示意图
Schematics



 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 DCResistance DCR _{max} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI22-1408B-R40M	0.40 ±20%	23.00	1.18	66.00	250
SPI22-1408B-R90M	0.90 ±20%	21.50	1.46	45.00	250
SPI22-1408B-1R5M	1.50 ±20%	20.00	2.02	34.00	250
SPI22-1408B-2R4M	2.40 ±20%	17.50	3.23	28.00	250
SPI22-1408B-3R4M	3.40 ±20%	16.00	4.97	23.00	250
SPI22-1408B-4R7M	4.70 ±20%	12.50	6.03	19.00	250
SPI22-1408B-6R1M	6.10 ±20%	11.00	7.80	18.50	250
SPI22-1408B-7R7M	7.70 ±20%	10.00	9.85	15.50	250
SPI22-1408B-9R5M	9.50 ±20%	8.50	13.30	14.00	250
SPI22-1408B-470M	47.00 ±20%	3.00	51.10	5.00	250

测试状态
Test Condition

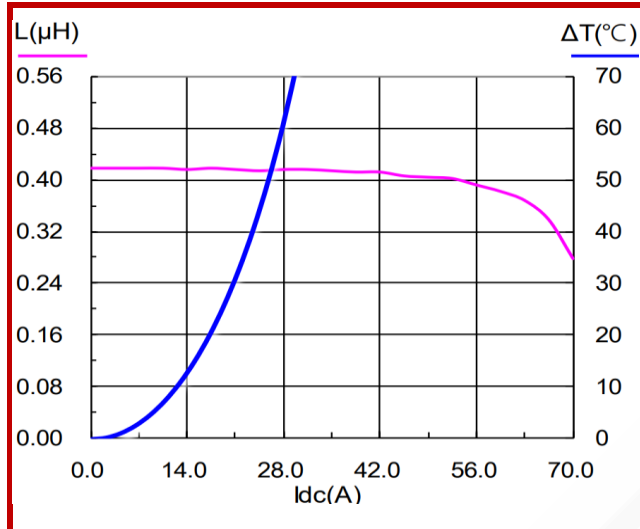
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



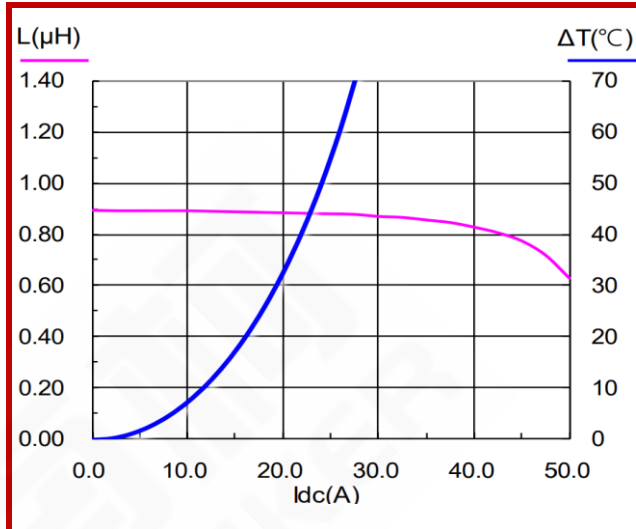
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

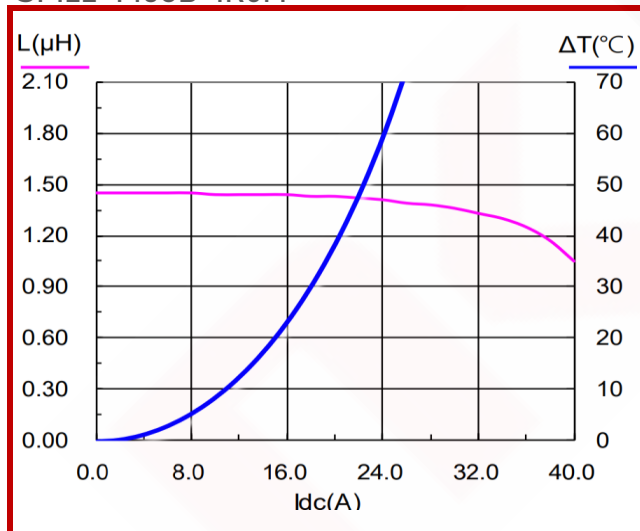
SPI22-1408B-R40M



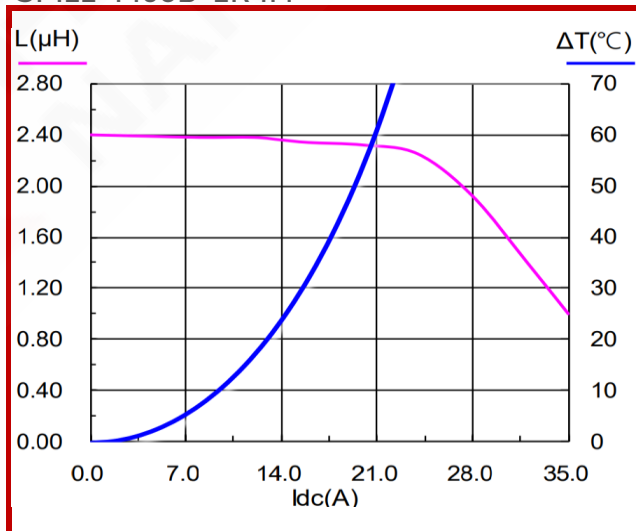
SPI22-1408B-R90M



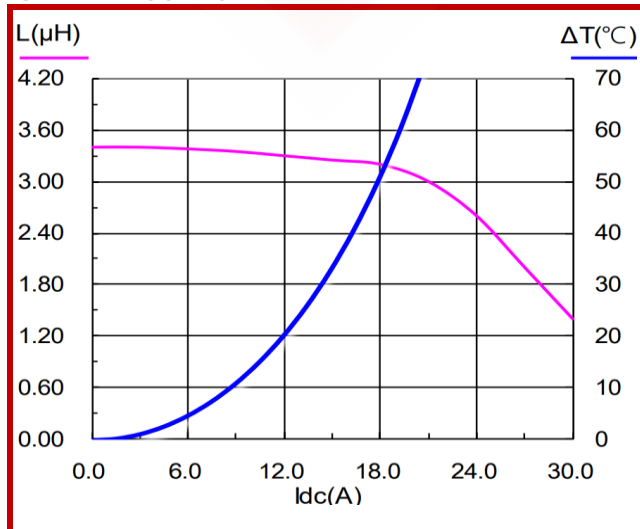
SPI22-1408B-1R5M



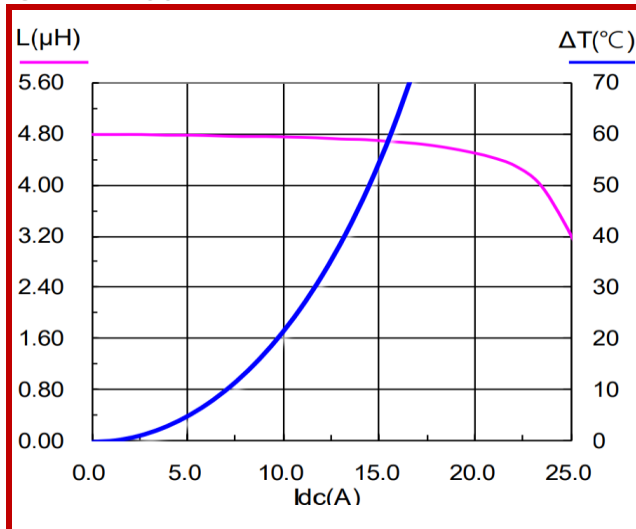
SPI22-1408B-2R4M



SPI22-1408B-3R4M



SPI22-1408B-4R7M

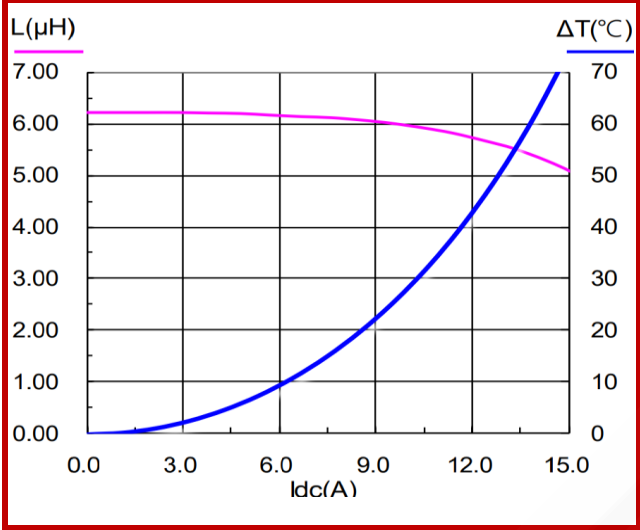




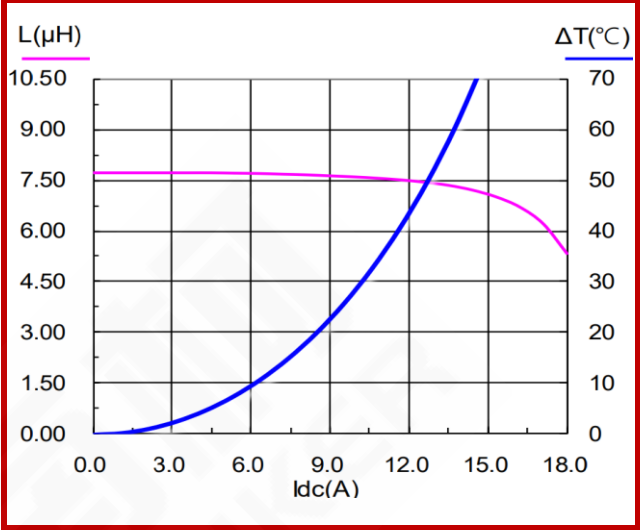
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

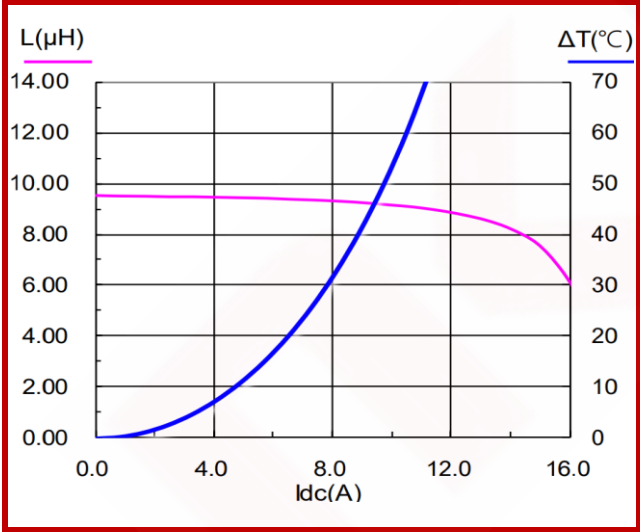
SPI22-1408B-6R1M



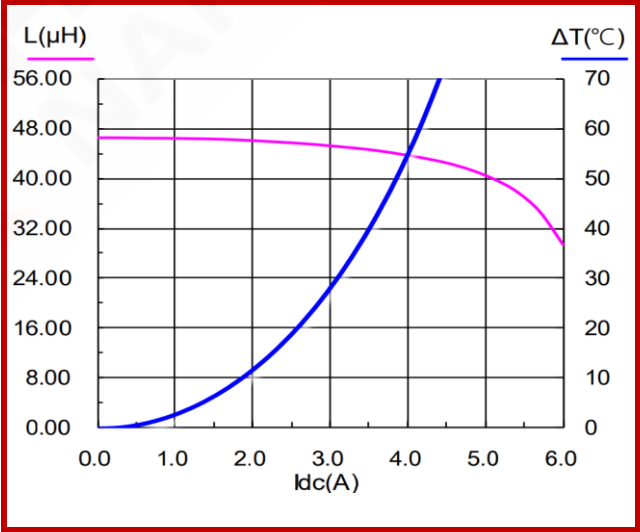
SPI22-1408B-7R7M



SPI22-1408B-9R5M



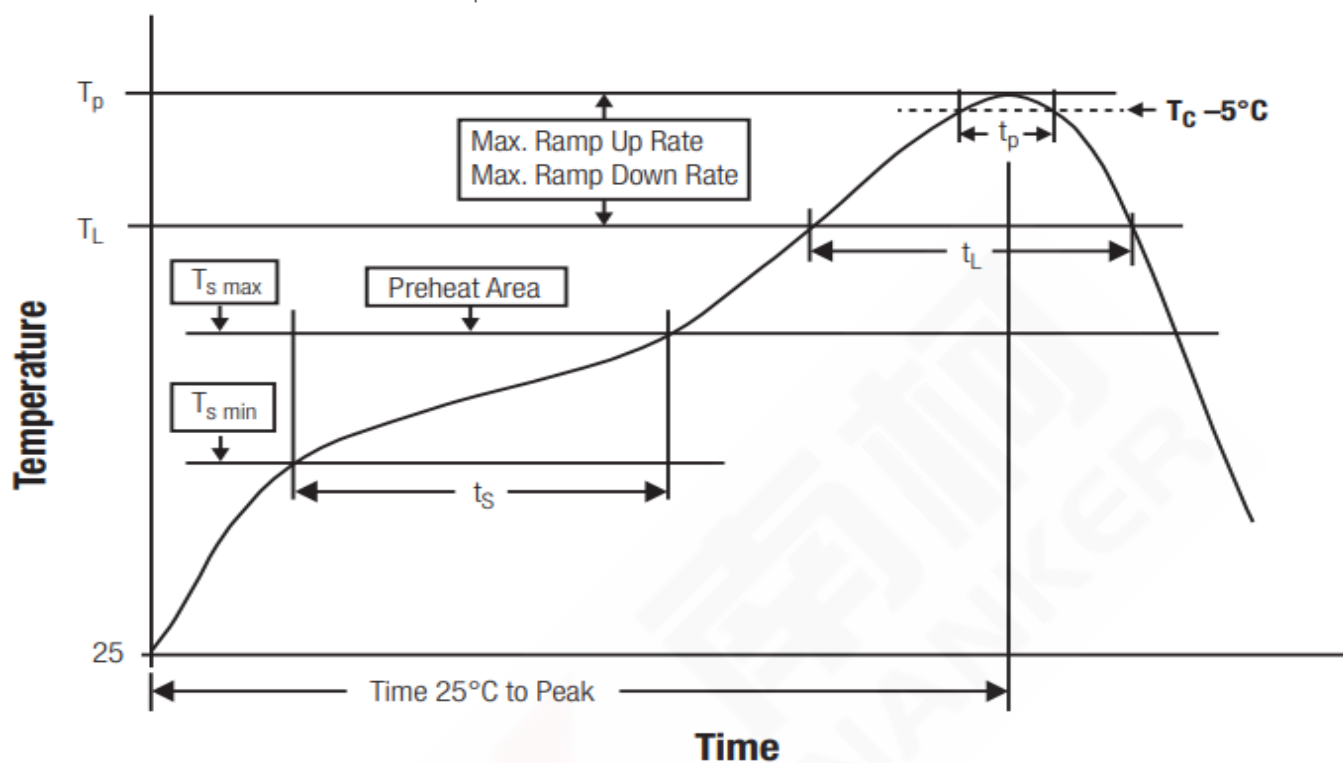
SPI22-1408B-470M





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.