

组合式大电流电感

Shielded Power Inductor (High Current SMD)



特性

Characteristics

低铁心损耗 (MnZn)

Low core losses (MnZn)

磁屏蔽

Magnetically shielded

电感值范围为0.70 μ H至680 μ H

Inductance values ranging from 0.7 μ H to 680 μ H

饱和电流高达125 A

Saturation current up to 125 A

应用

Application

谐振开关电源

Resonant SMPS

音频应用的过滤器

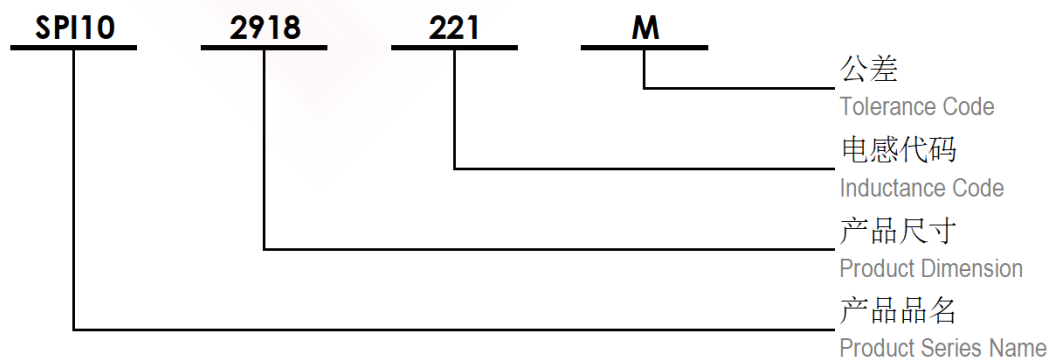
Filter for audio applications

高效率高压纹波电流DC/DC变换器用储能电感

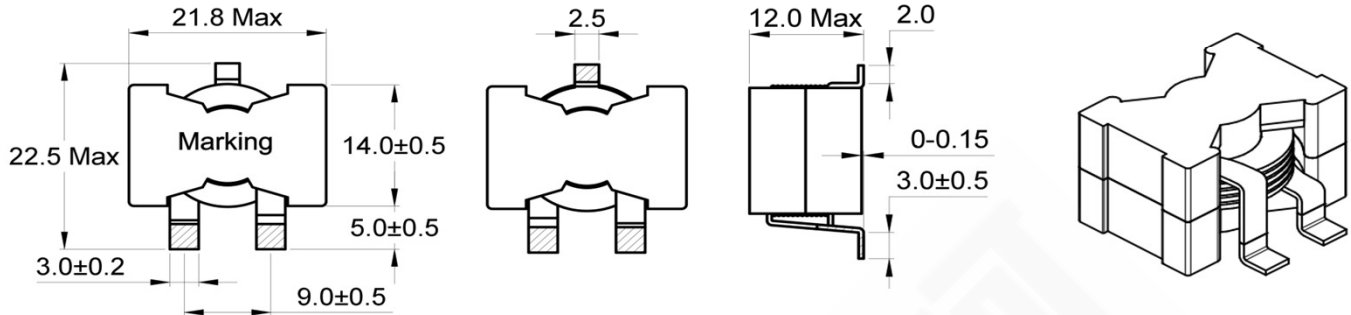
Storage inductor for high efficiency DC/DC converters with high ripple currents

产品品名介绍

Product Number Structure



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

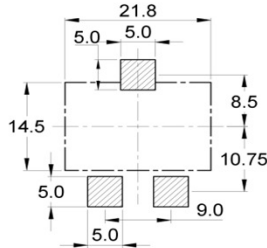
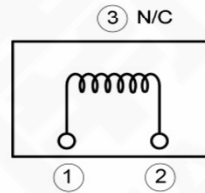


示意图 Schematics



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 DC Resistance DCR _{max} (mΩ)	饱和电流 Saturation Current I _{sat} typ (A)	包装数量 Packaging Qty. pcs
SPI10-2212-R47M	0.47 ±20%	45.00	0.48	75.00	480
SPI10-2212-R82M	0.82 ±20%	45.00	0.48	55.00	480
SPI10-2212-1R0M	1.00 ±20%	35.00	1.38	62.00	480
SPI10-2212-1R5M	1.50 ±20%	35.00	1.38	60.00	480
SPI10-2212-2R2M	2.20 ±20%	28.00	2.13	50.00	480
SPI10-2212-3R3M	3.30 ±20%	28.00	2.13	35.00	480
SPI10-2212-4R7M	4.70 ±20%	28.00	2.13	24.00	480
SPI10-2212-6R8M	6.80 ±20%	28.00	2.13	18.00	480
SPI10-2212-8R2M	8.20 ±20%	28.00	2.13	13.00	480
SPI10-2212-100M	10.00 ±20%	16.00	5.76	13.00	480
SPI10-2212-150M	15.00 ±20%	16.00	5.76	10.00	480
SPI10-2212-220M	22.00 ±20%	14.00	8.16	10.00	480
SPI10-2212-330M	33.00 ±20%	14.00	8.16	7.00	480

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

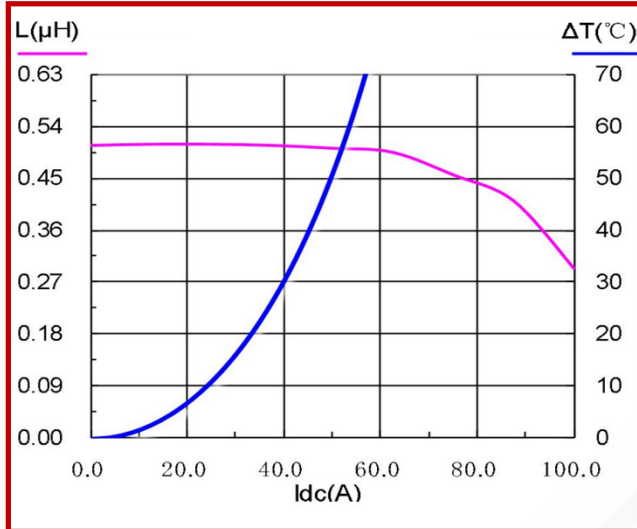
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



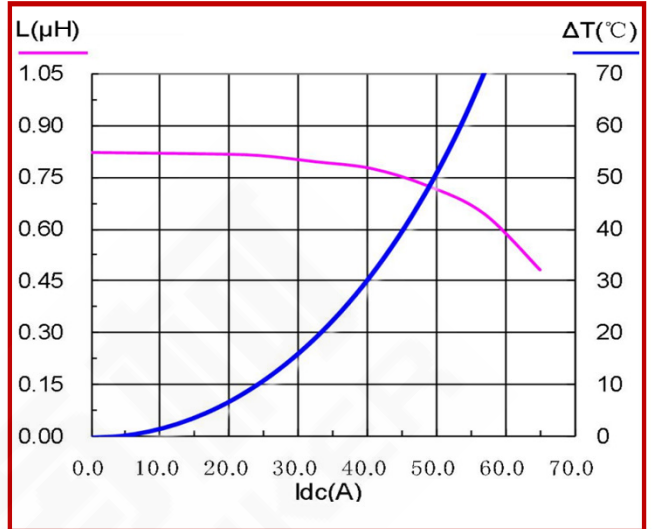
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

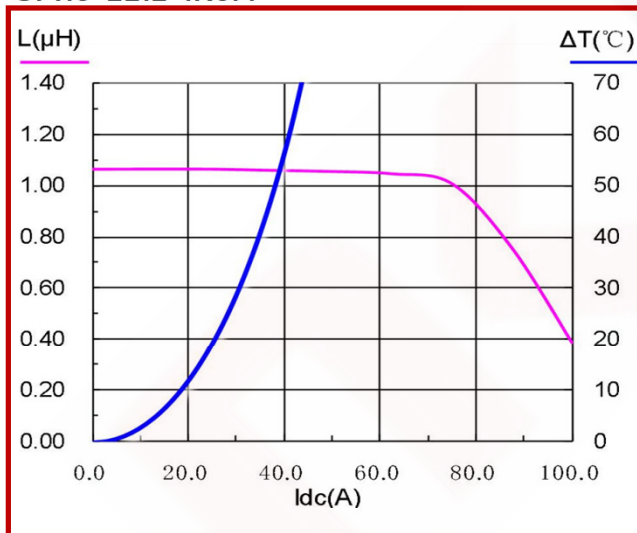
SPI10-2212-R47M



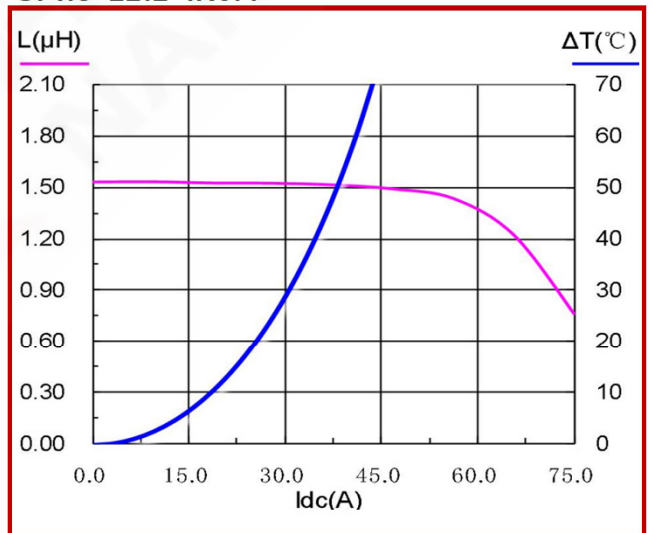
SPI10-2212-R82M



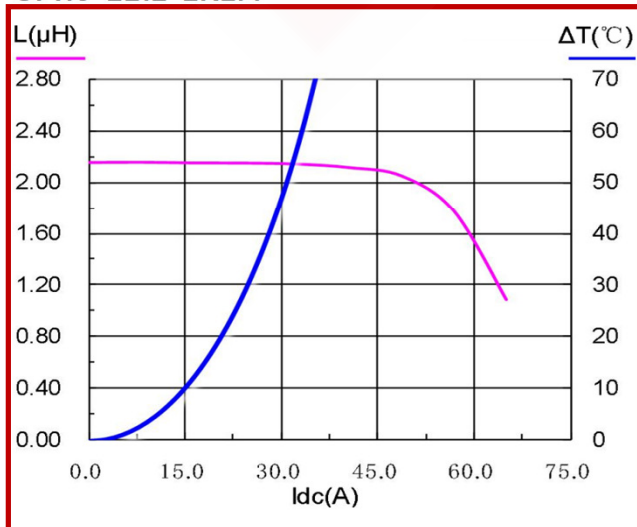
SPI10-2212-1R0M



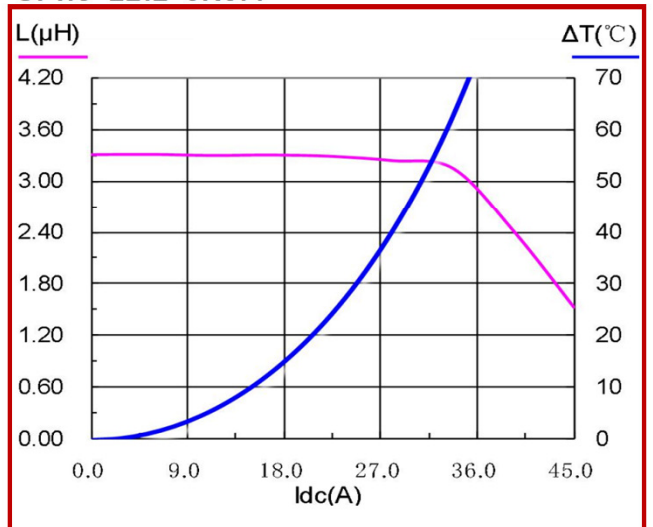
SPI10-2212-1R5M



SPI10-2212-2R2M



SPI10-2212-3R3M

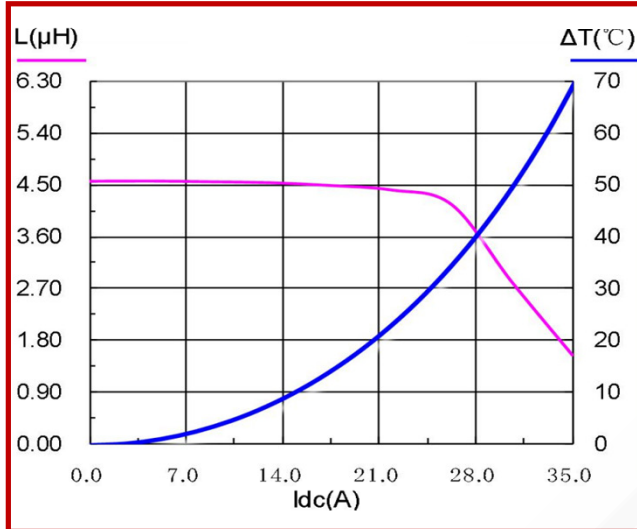




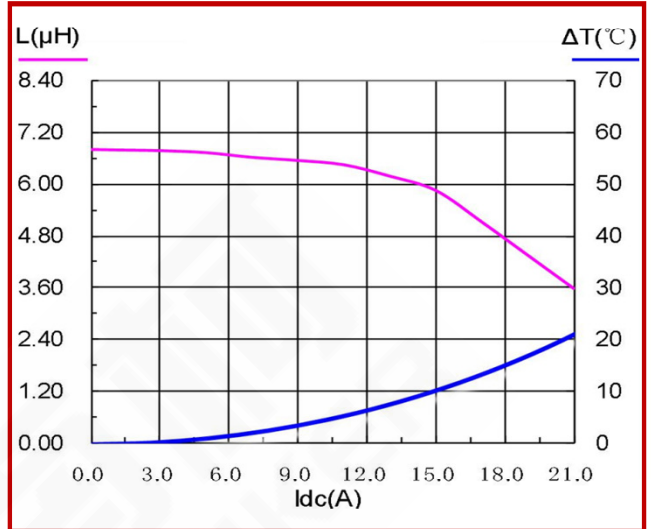
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

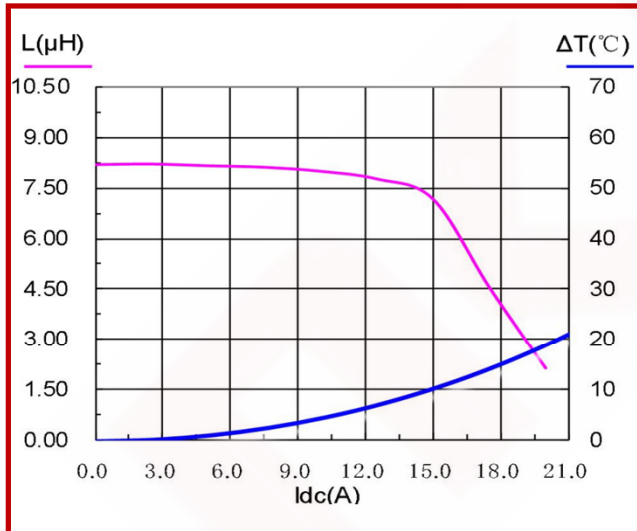
SPI10-2212-4R7M



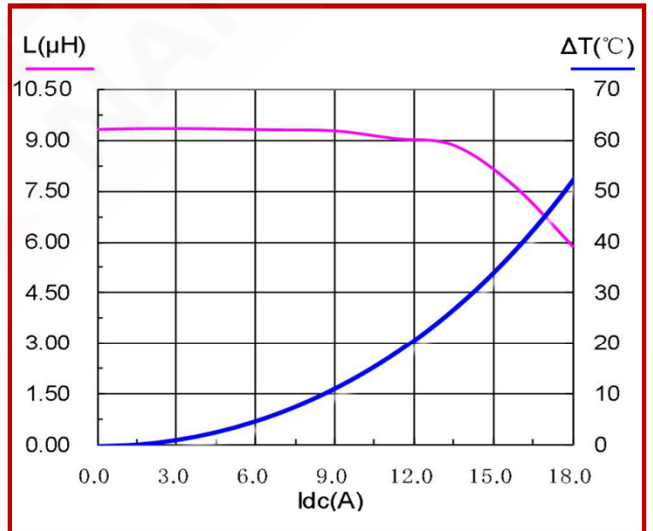
SPI10-2212-6R8M



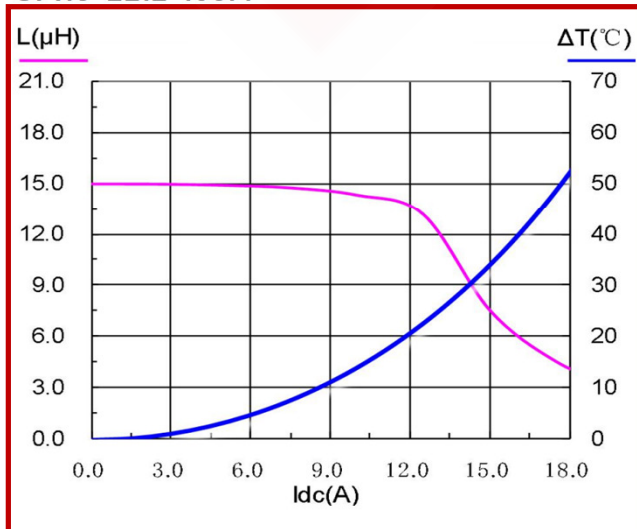
SPI10-2212-8R2M



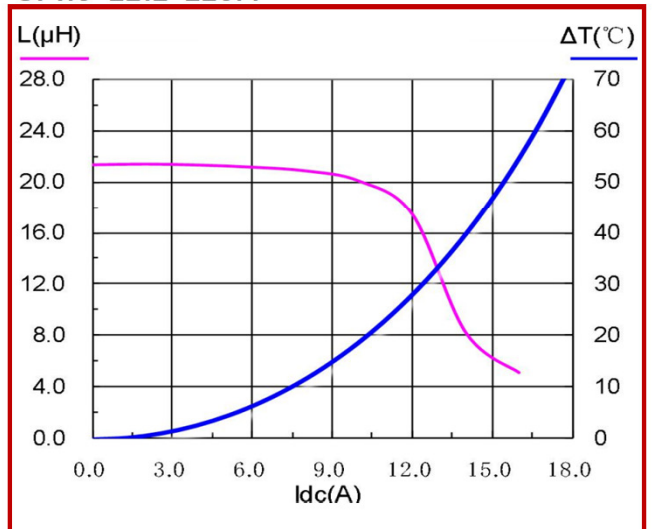
SPI10-2212-100M



SPI10-2212-150M



SPI10-2212-220M

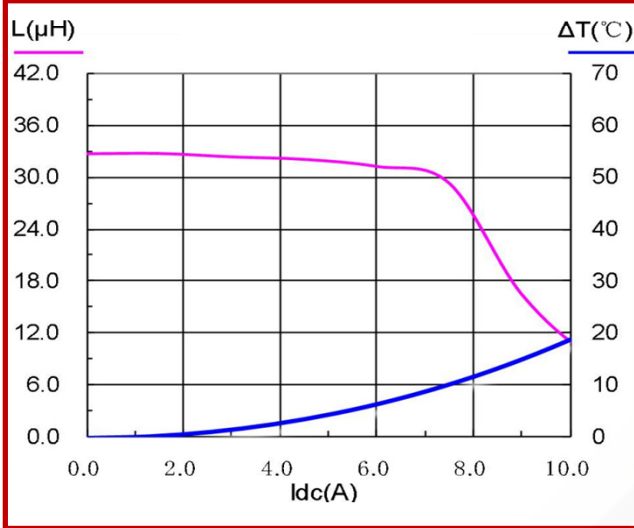




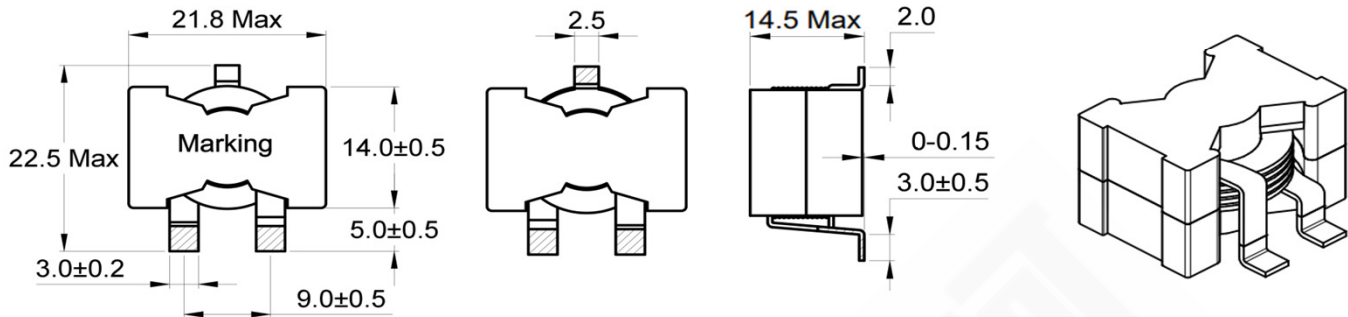
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI10-2212-330M



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

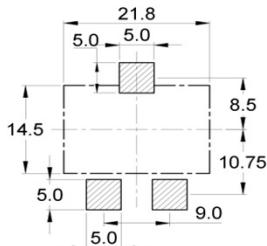
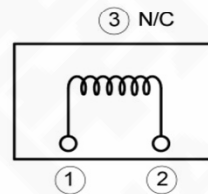


示意图 Schematics



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
SPI10-2214-R70M	0.70 ±20%	32.00	0.79	75.00	400
SPI10-2214-1R4M	1.40 ±20%	31.50	1.02	60.00	400
SPI10-2214-2R2M	2.20 ±20%	30.50	1.58	52.00	400
SPI10-2214-3R1M	3.10 ±20%	26.00	2.30	45.00	400
SPI10-2214-4R2M	4.20 ±20%	24.00	3.04	38.00	400
SPI10-2214-5R5M	5.50 ±20%	22.00	3.96	33.00	400
SPI10-2214-7R0M	7.00 ±20%	21.00	5.10	30.00	400
SPI10-2214-8R6M	8.60 ±20%	17.00	7.08	25.00	400
SPI10-2214-100M	10.00 ±20%	16.00	7.80	23.00	400
SPI10-2214-150M	15.00 ±20%	14.00	8.50	21.00	400
SPI10-2214-220M	22.00 ±20%	12.50	10.30	15.00	400
SPI10-2214-330M	33.00 ±20%	12.00	11.10	11.00	400
SPI10-2214-470M	47.00 ±20%	11.50	12.00	8.50	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

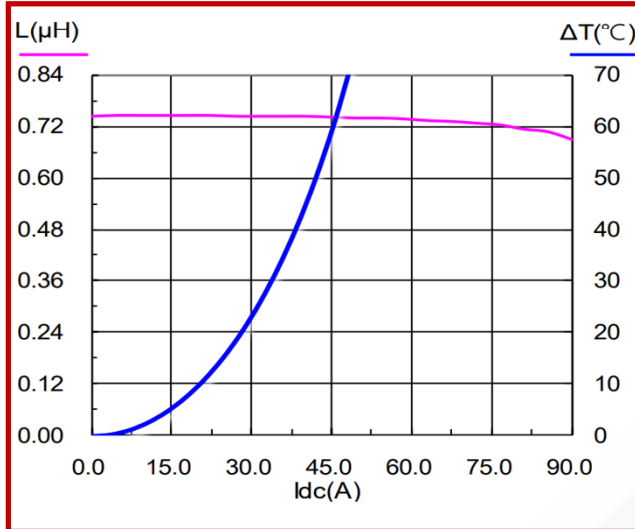
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



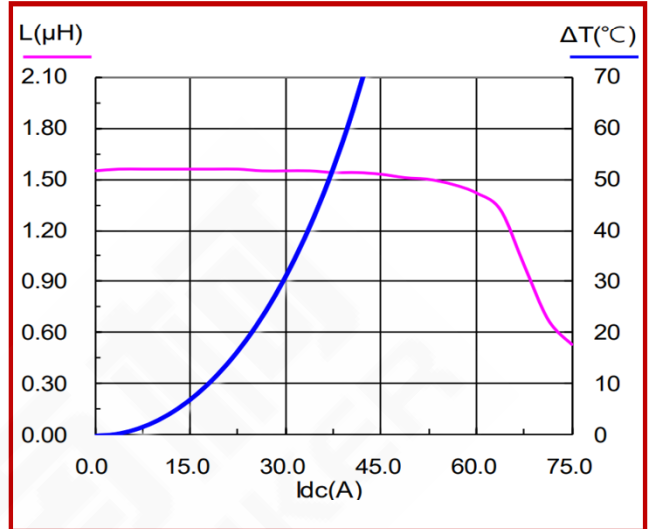
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

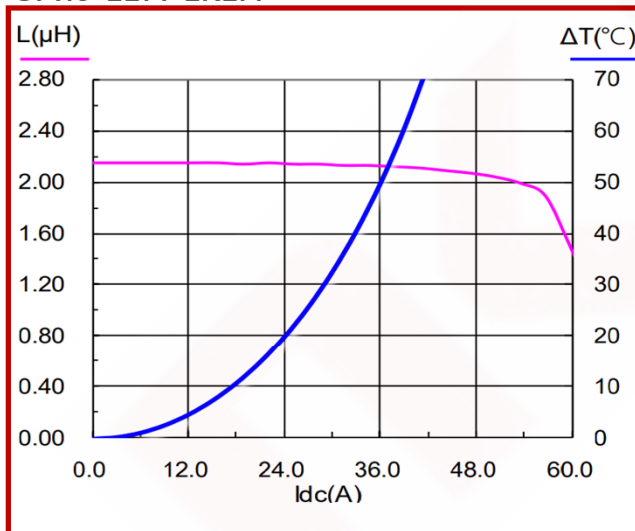
SPI10-2214-R70M



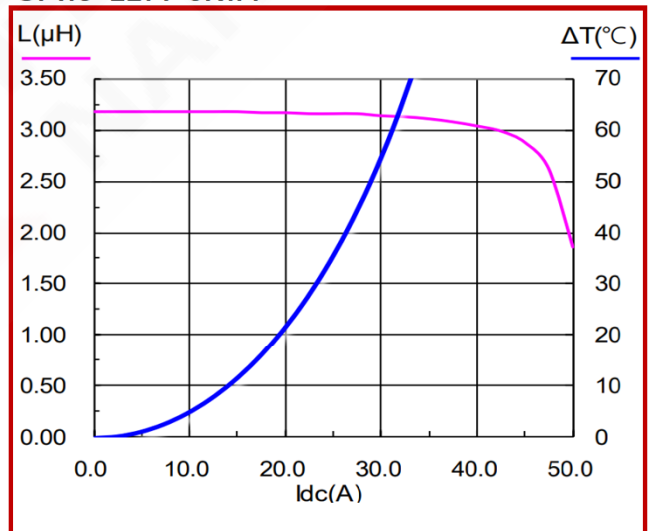
SPI10-2214-1R4M



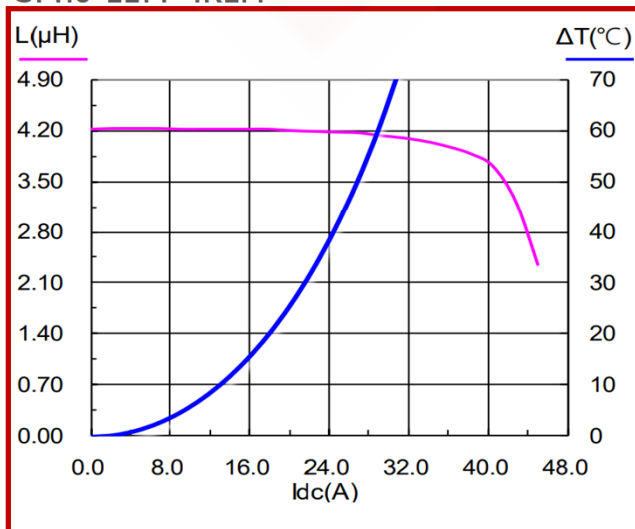
SPI10-2214-2R2M



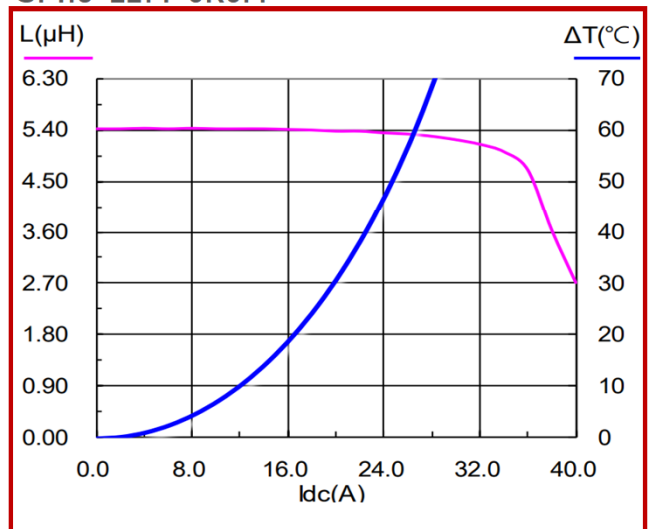
SPI10-2214-3R1M



SPI10-2214-4R2M



SPI10-2214-5R5M

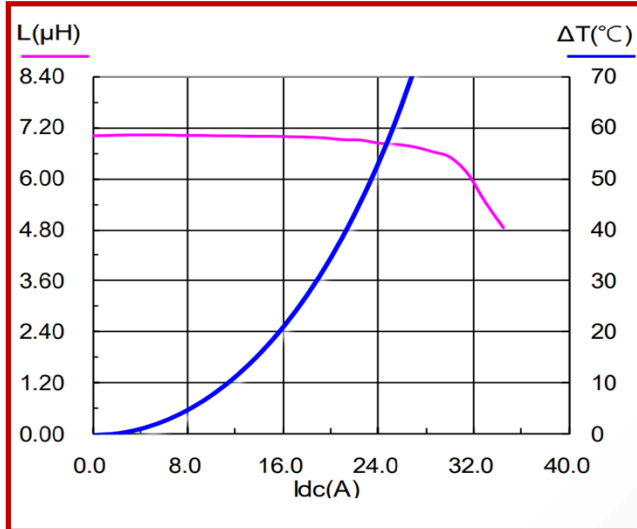




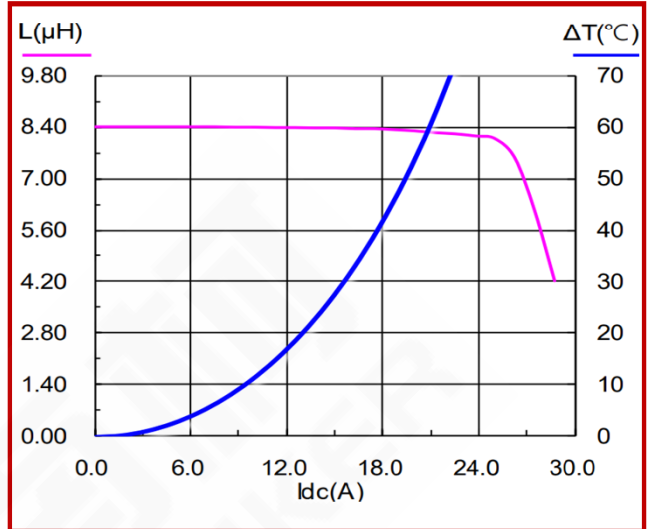
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

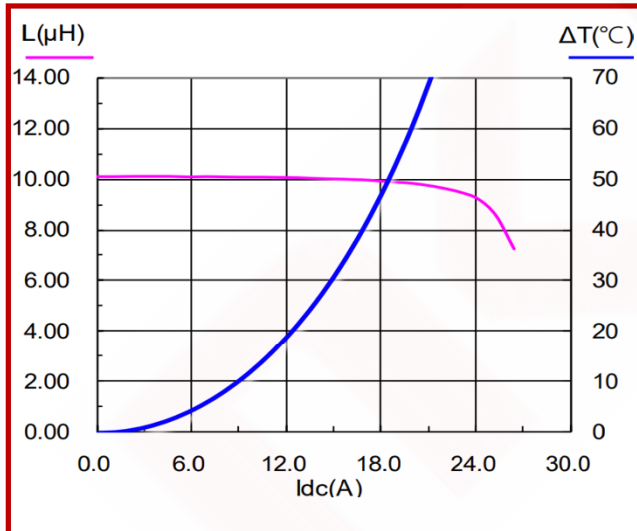
SPI10-2214-7R0M



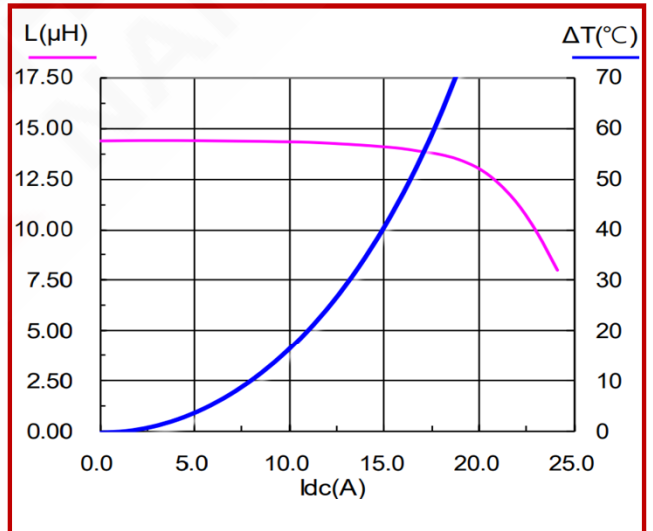
SPI10-2214-8R6M



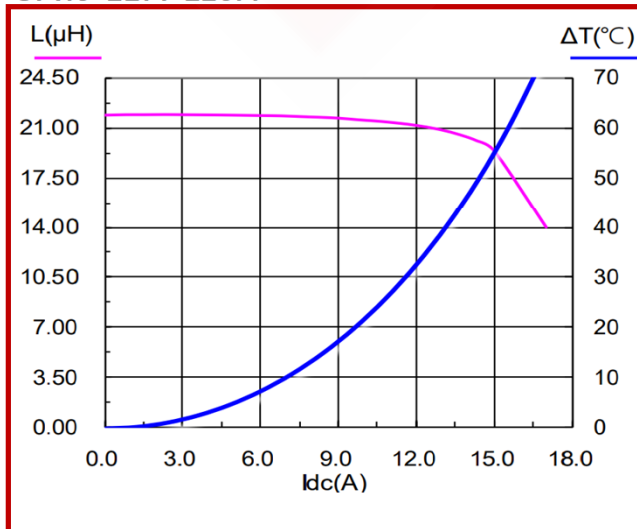
SPI10-2214-100M



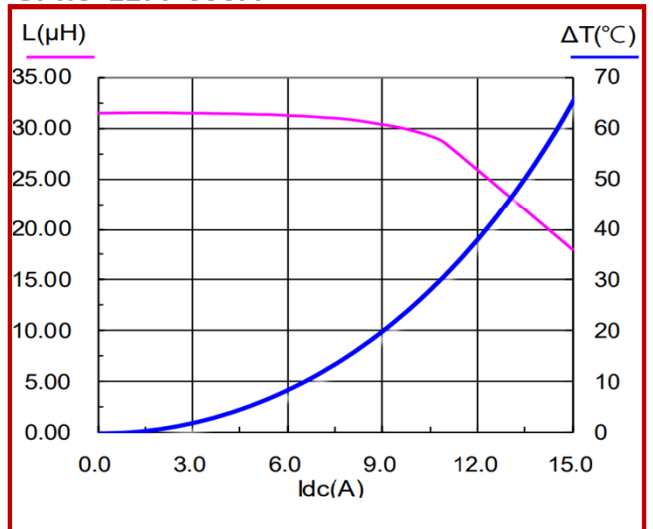
SPI10-2214-150M



SPI10-2214-220M



SPI10-2214-330M

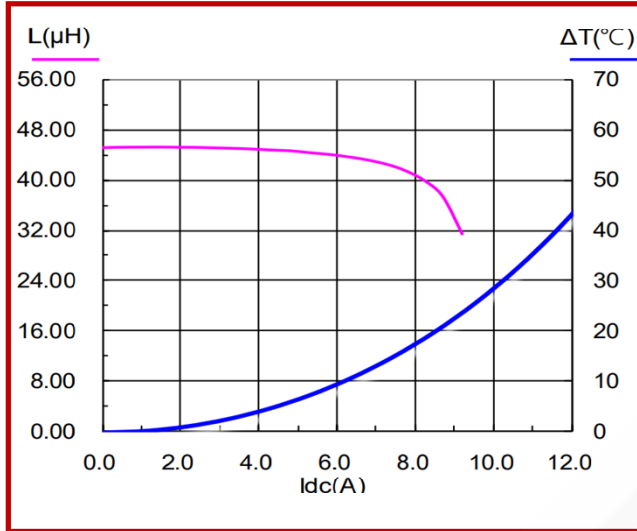


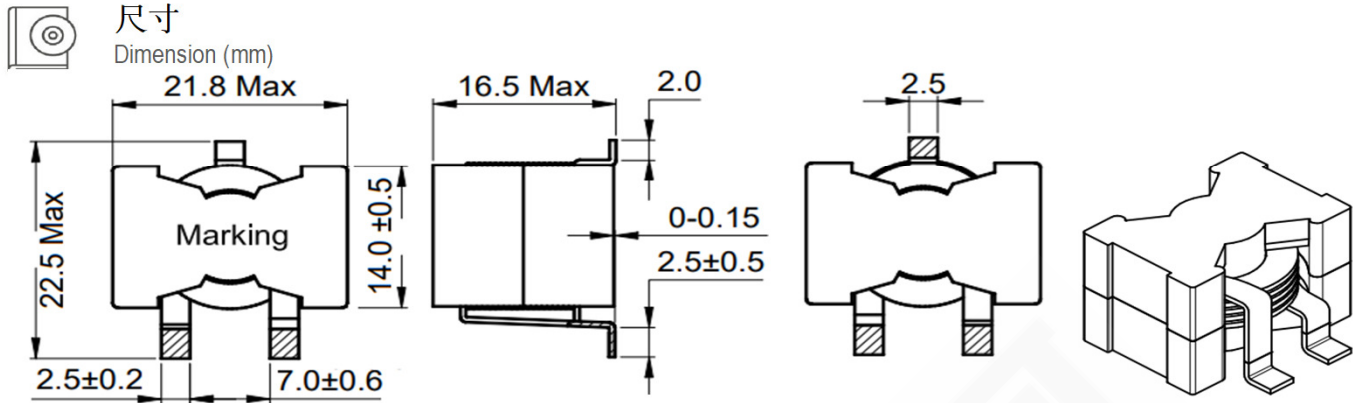


饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI10-2214-470M





焊盘推荐
Land Pattern Recommended (mm)

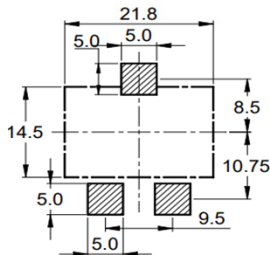
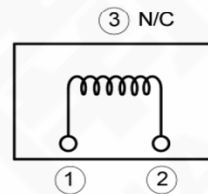


示意图
Schematics



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
SPI10-2216-4R7M	4.70 ±20%	21.00	4.00	42.00	400
SPI10-2216-6R8M	6.80 ±20%	20.00	4.30	25.00	400
SPI10-2216-8R2M	8.20 ±20%	20.00	4.30	25.00	400
SPI10-2216-100M	10.00 ±20%	16.00	6.30	24.00	400
SPI10-2216-220M	22.00 ±20%	16.00	6.30	10.00	400
SPI10-2216-330M	33.00 ±20%	12.00	15.00	9.00	400
SPI10-2216-470M	47.00 ±20%	12.00	15.00	6.50	400

测试状态

Test Condition

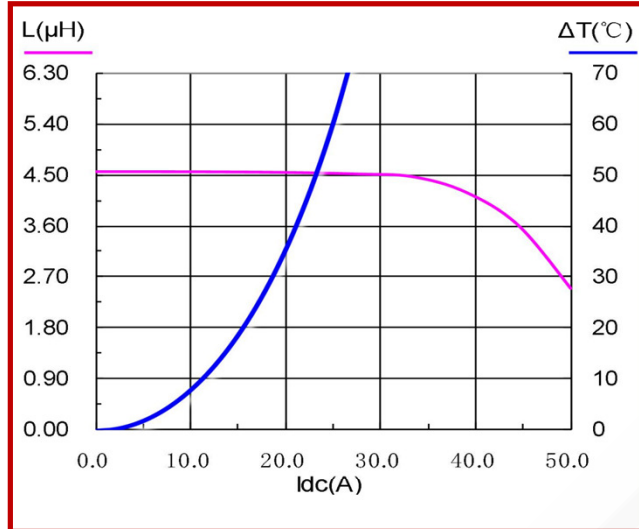
- ☆ 电感测试条件为 100kHz, 0.10V
Inductance measure condition at 100kHz, 0.10V
- ☆ 工作温度: -40°C ~ +125°C
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



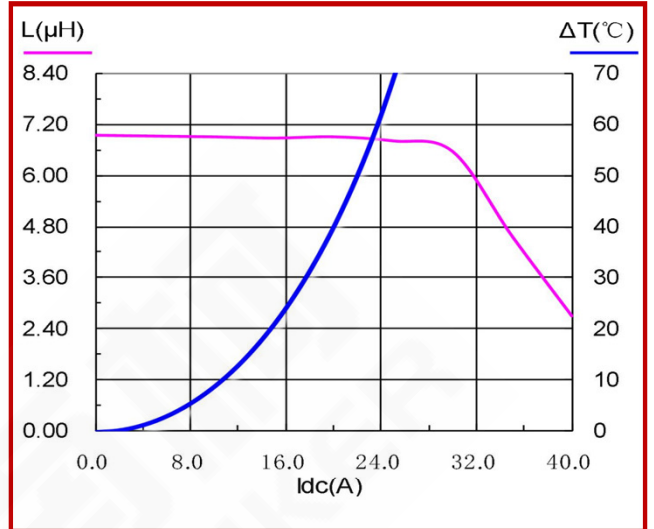
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

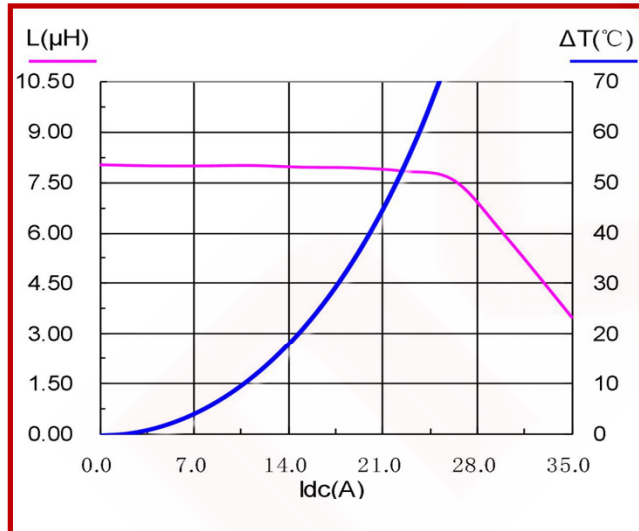
SPI10-2216-4R7M



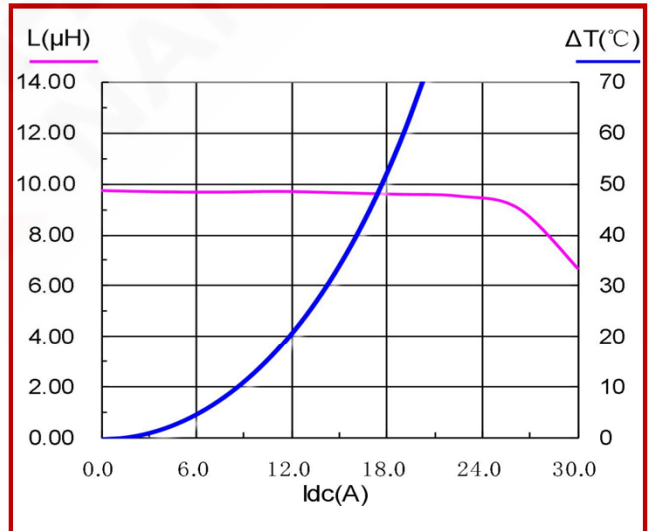
SPI10-2216-6R8M



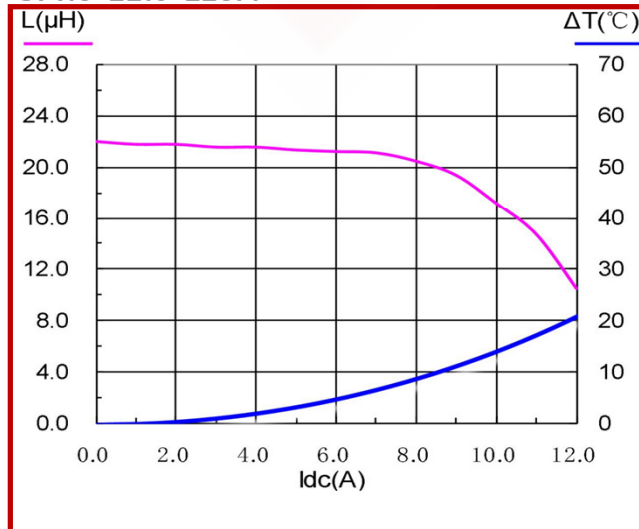
SPI10-2216-8R2M



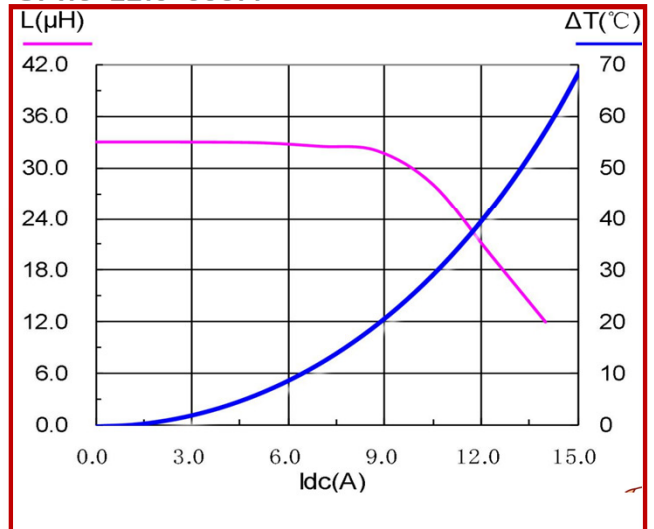
SPI10-2216-100M



SPI10-2216-220M



SPI10-2216-330M

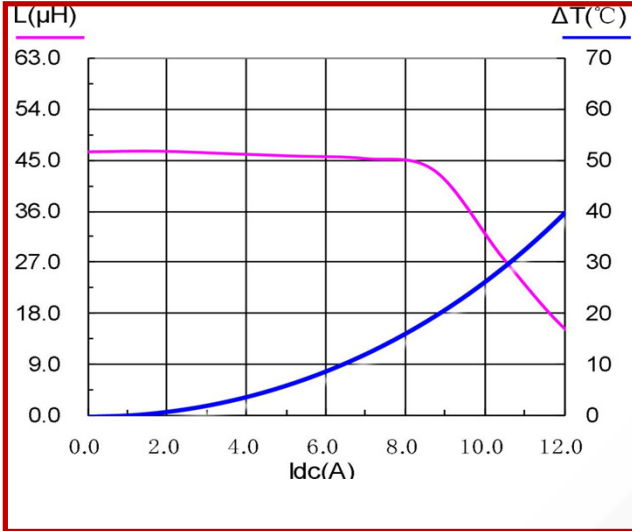




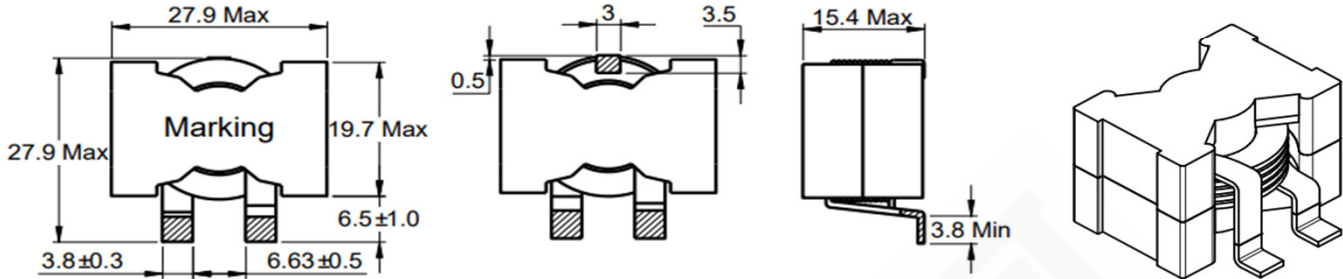
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

SPI10-2216-470M



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

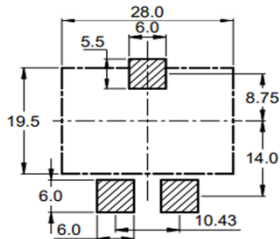
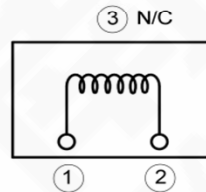


示意图 Schematics



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
SPI10-2815-2R2M	2.20 ±20%	32.00	1.65	>100	160
SPI10-2815-3R3M	3.30 ±20%	32.00	1.65	68.00	160
SPI10-2815-4R7M	4.70 ±20%	32.00	1.65	50.00	160
SPI10-2815-6R8M	6.80 ±20%	32.00	1.65	36.00	160
SPI10-2815-100M	10.00 ±20%	32.00	1.65	23.00	160
SPI10-2815-150M	15.00 ±20%	32.00	1.65	15.00	160
SPI10-2815-220M	22.00 ±20%	32.00	1.65	9.60	160
SPI10-2815-330M	33.00 ±20%	32.00	1.65	5.90	160

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

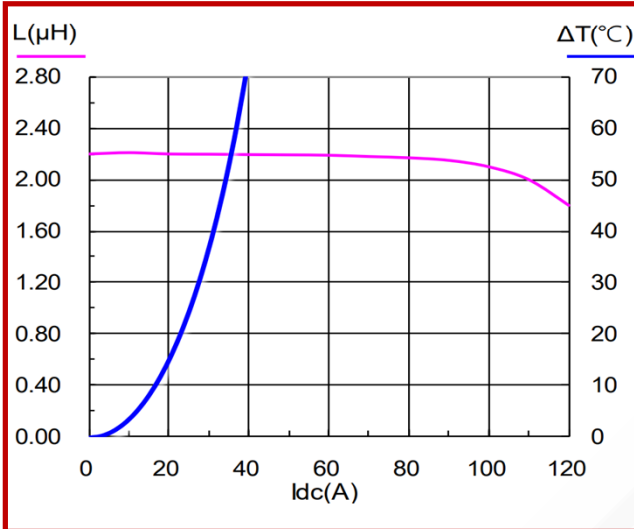
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



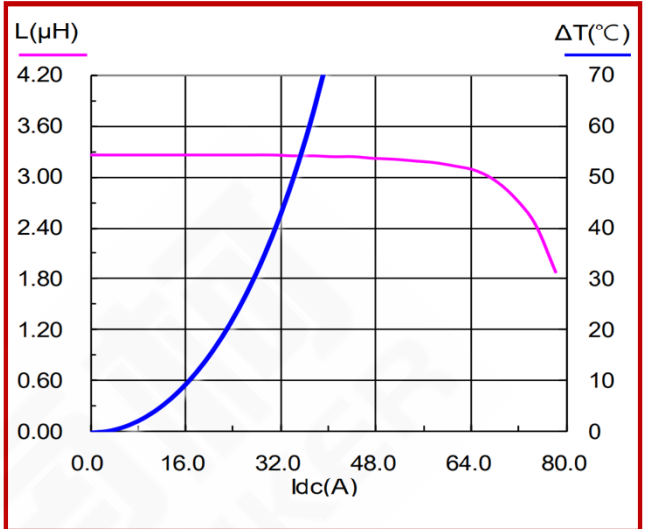
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

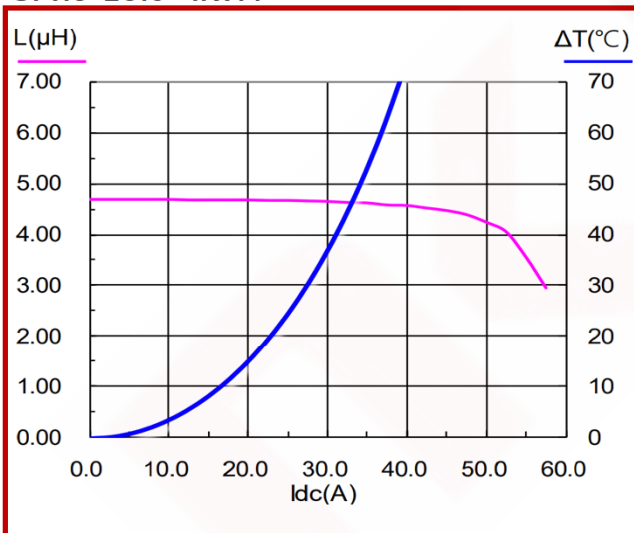
SPI10-2815-2R2M



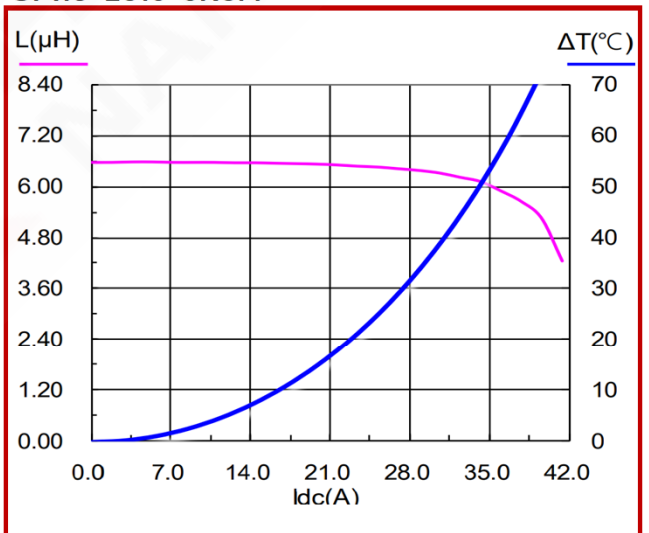
SPI10-2815-3R3M



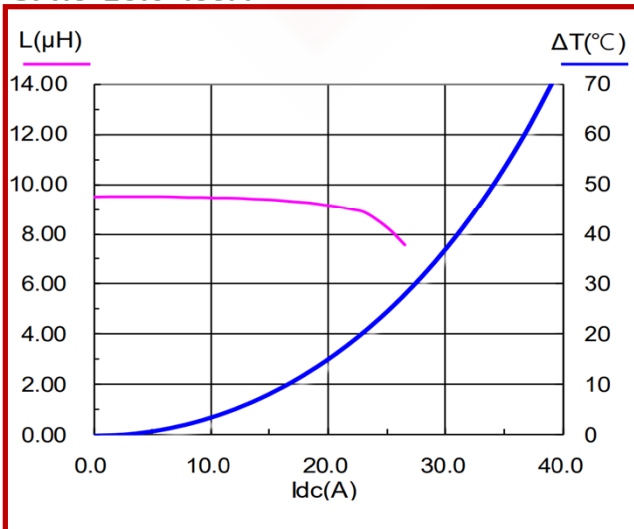
SPI10-2815-4R7M



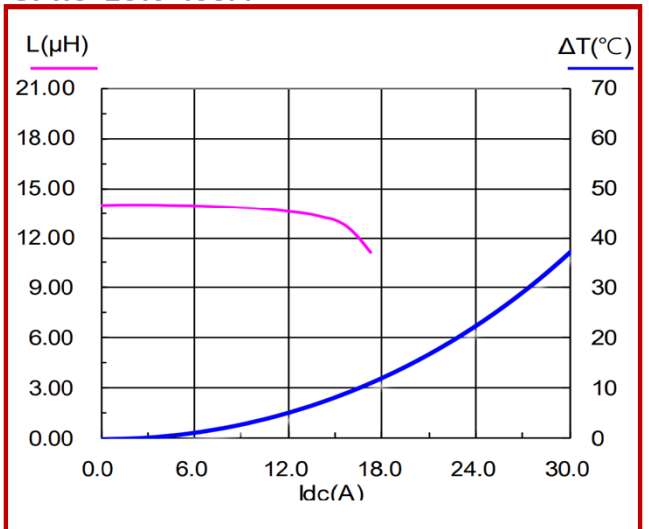
SPI10-2815-6R8M



SPI10-2815-100M



SPI10-2815-150M

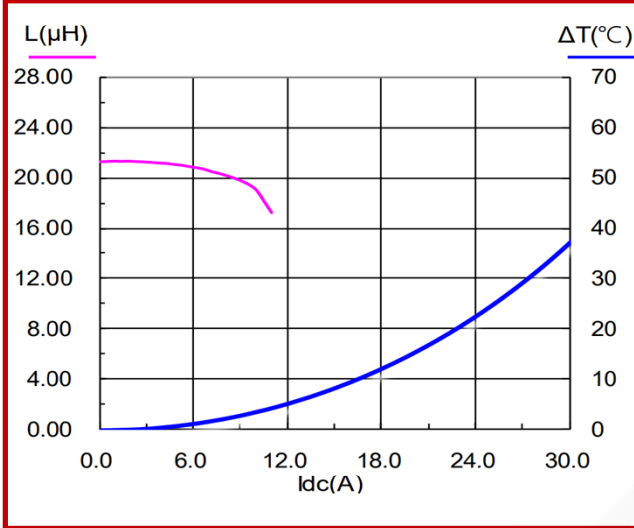




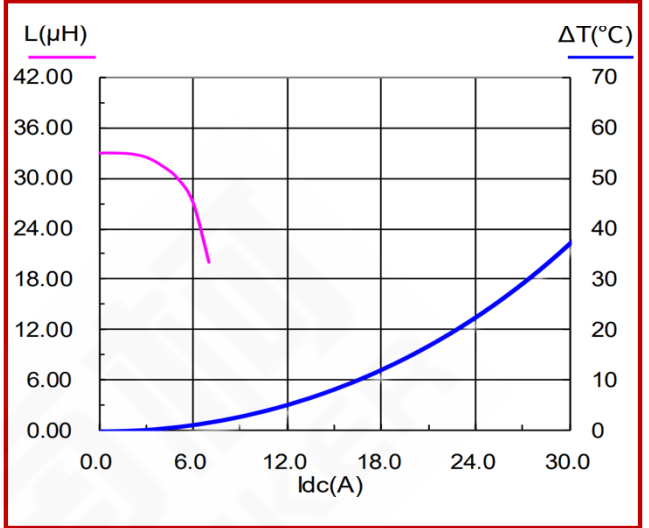
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

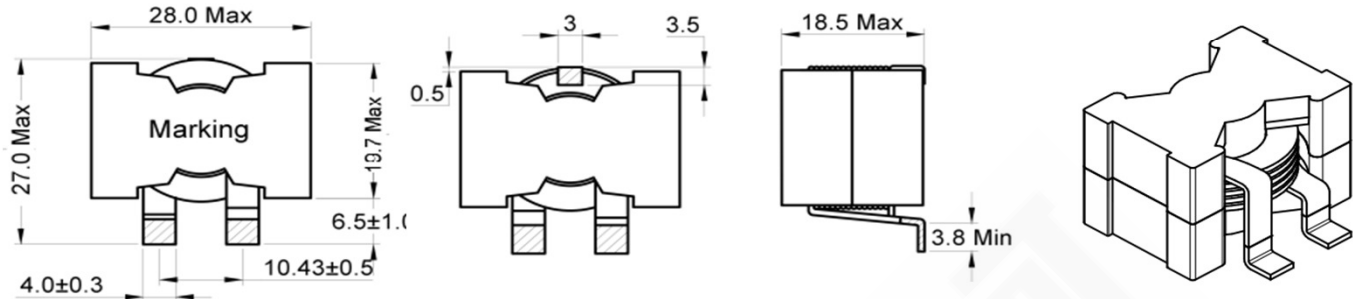
SPI10-2815-220M



SPI10-2815-330M



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

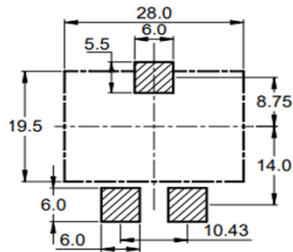
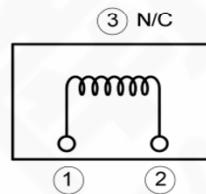


示意图 Schematics



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
SPI10-2818-3R3M	3.30 ±20%	30.00	2.58	94.00	160
SPI10-2818-4R7M	4.70 ±20%	30.00	2.58	65.00	160
SPI10-2818-6R8M	6.80 ±20%	30.00	2.58	48.00	160
SPI10-2818-100M	10.00 ±20%	30.00	2.58	33.00	160
SPI10-2818-150M	15.00 ±20%	30.00	2.58	24.00	160
SPI10-2818-220M	22.00 ±20%	30.00	2.58	15.00	160
SPI10-2818-330M	33.00 ±20%	30.00	2.58	10.50	160

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

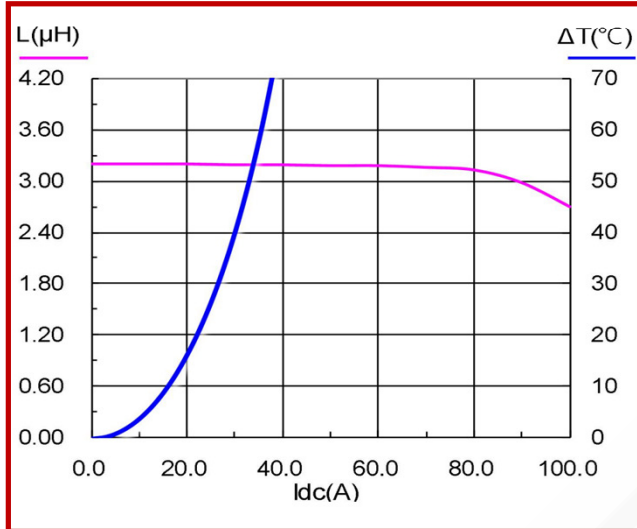
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



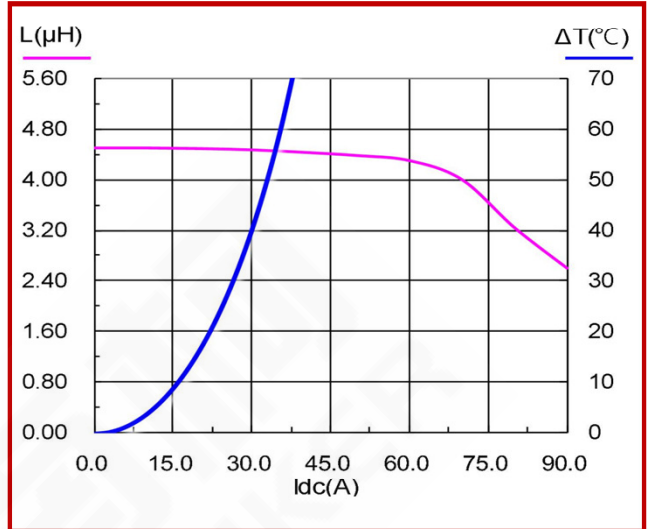
饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

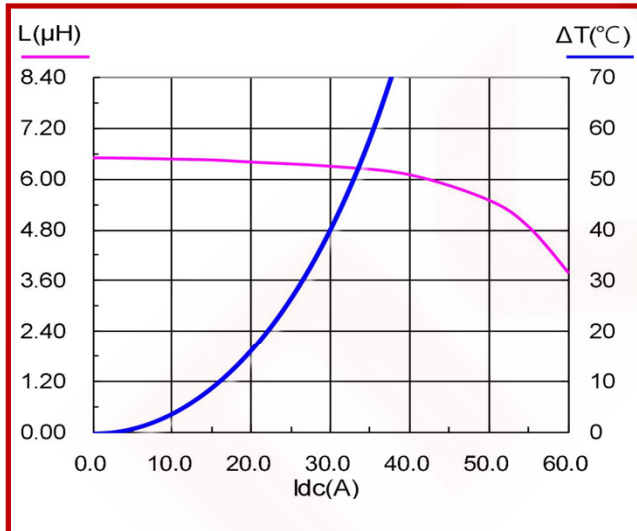
SPI10-2818-3R3M



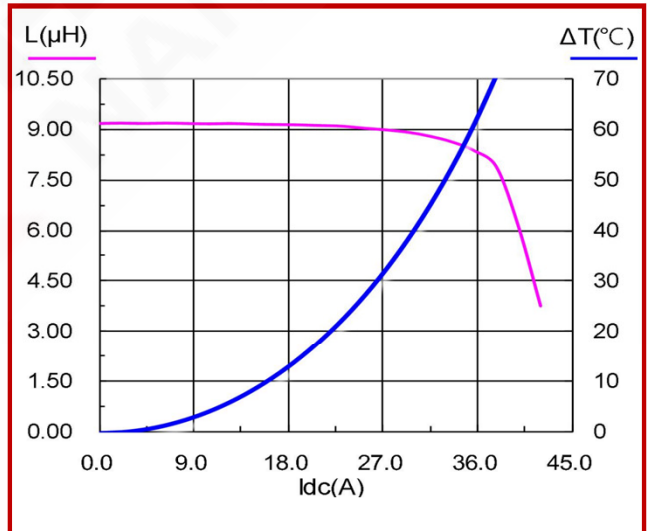
SPI10-2818-4R7M



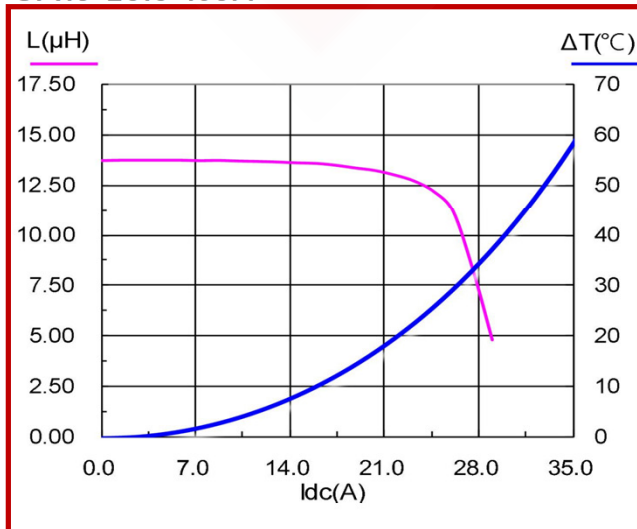
SPI10-2818-6R8M



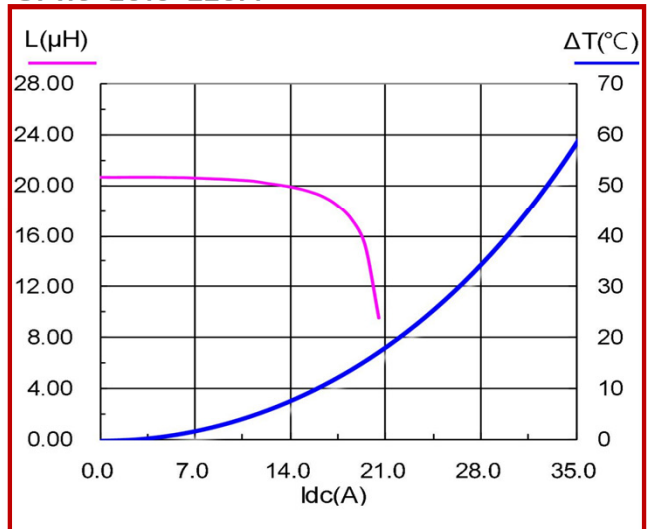
SPI10-2818-100M



SPI10-2818-150M



SPI10-2818-220M

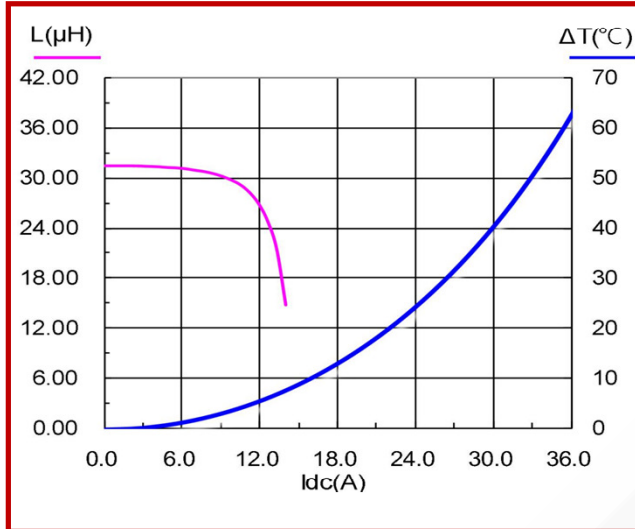




饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

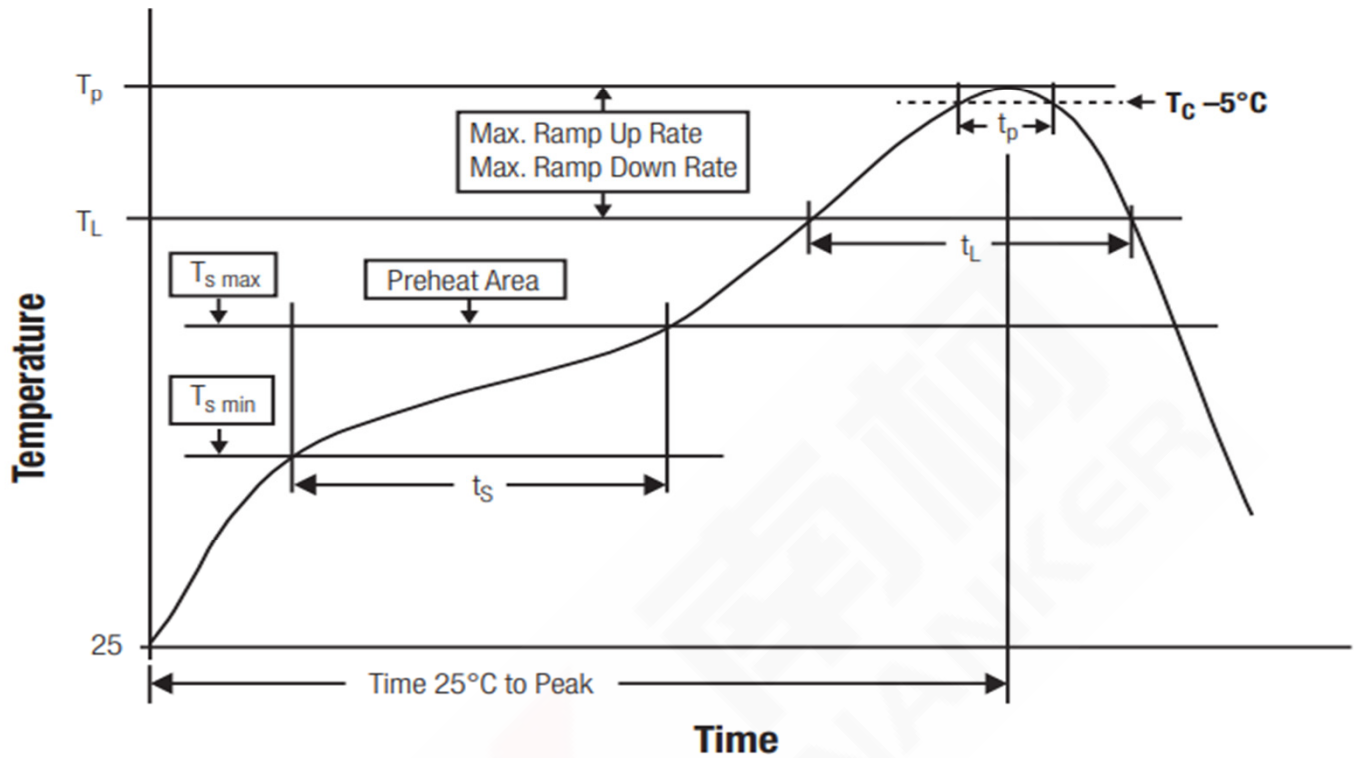
SPI10-2818-330M





回流焊曲线图

Classification Reflow Profile for SMT Components



封装体峰值温度(Tp)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.