

磁屏蔽电感

Shielded Power Inductor (SMD)



特性

Characteristics

核心材料: NiZn

Core material: NiZn

扁平线功率电感器

Flat wire power inductor

磁屏蔽, 产生低漏磁场

Magnetically shielded which results in a low leakage field

扁平线圈, 在高频范围内降低损耗

Flat wire coil for lower losses at high frequency ranges

应用

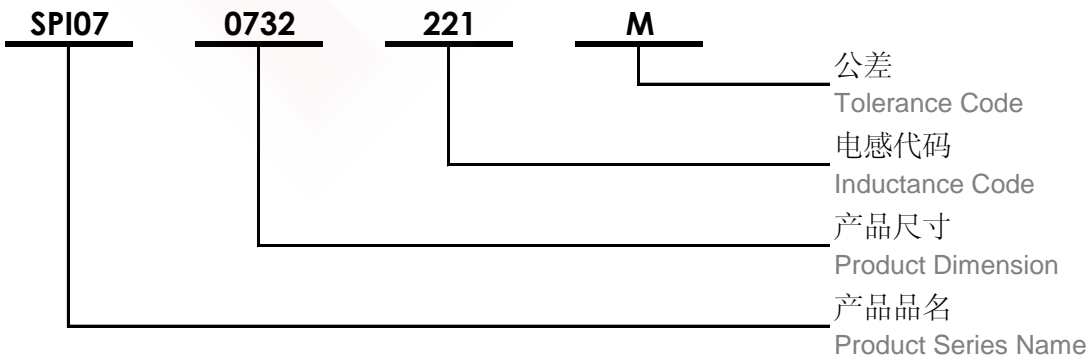
Application

适用于高频开关电源

Suitable for high frequency switching regulators

产品品名介绍

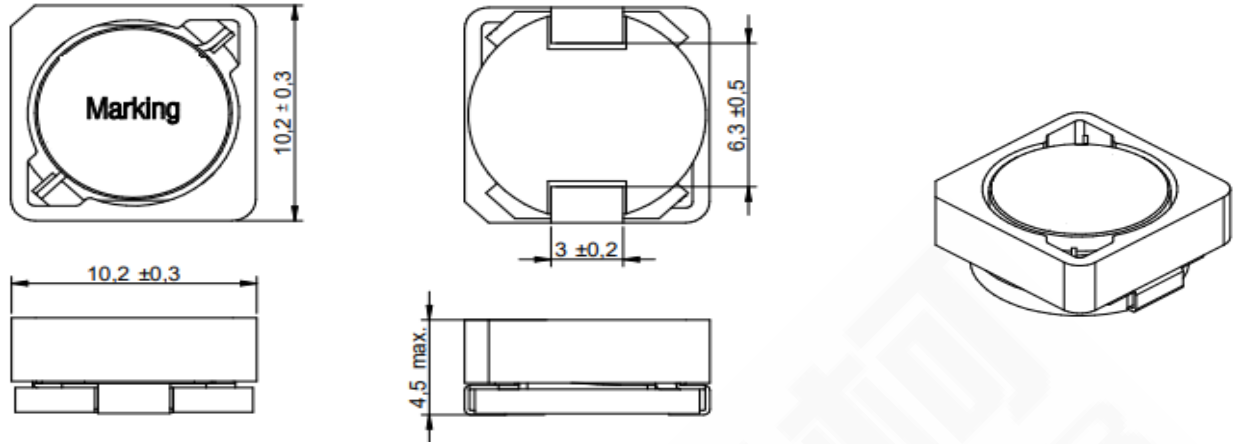
Product Number Structure





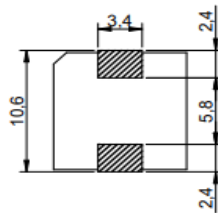
尺寸

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)	卷盘数量 Taping Reel Qty. pcs
SPI07-1005-R22N	0.22 ±30%	16.00	3.50	32.00	500
SPI07-1005-R50N	0.50 ±30%	13.20	5.00	23.00	500
SPI07-1005-1R1N	1.10 ±30%	11.20	6.65	16.00	500
SPI07-1005-1R8N	1.80 ±30%	9.40	8.40	13.00	500
SPI07-1005-2R5N	2.50 ±30%	8.40	10.20	10.50	500
SPI07-1005-3R6N	3.60 ±30%	8.20	12.20	8.50	500
SPI07-1005-4R7N	4.70 ±30%	6.20	19.50	8.00	500
SPI07-1005-6R2N	6.20 ±30%	5.70	22.40	7.40	500
SPI07-1005-8R2N	8.20 ±30%	5.05	28.60	5.80	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 5.0 mA

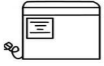
Inductance measure condition at 100 kHz/ 5.0 mA

☆ 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10%时所加载的实际直流电流值

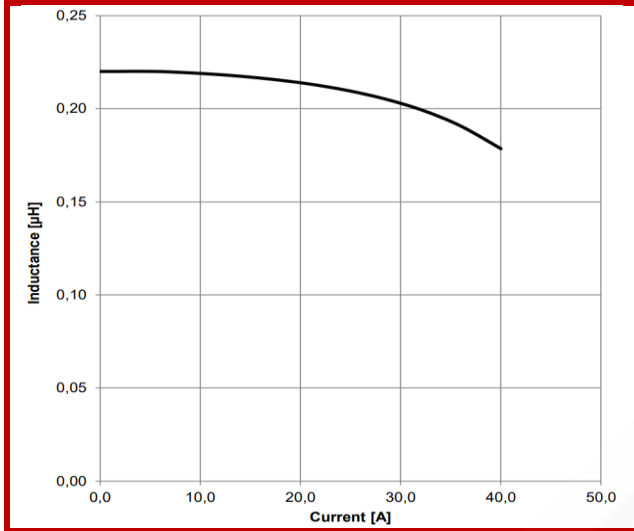
Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



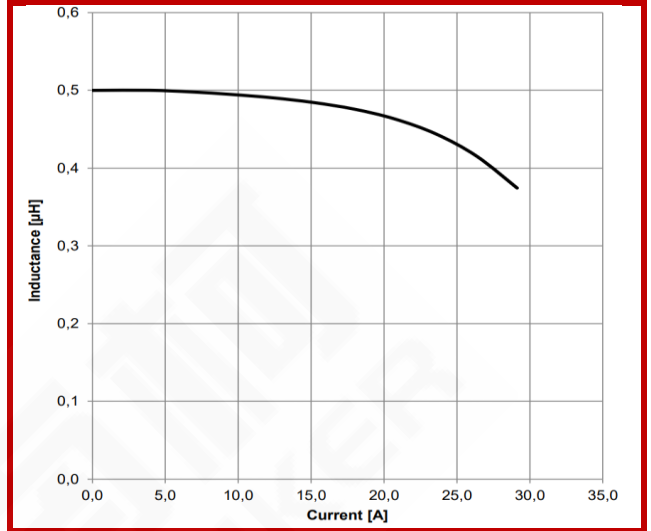
典型电感与电流特性

Typical Inductance vs. Current Characteristics

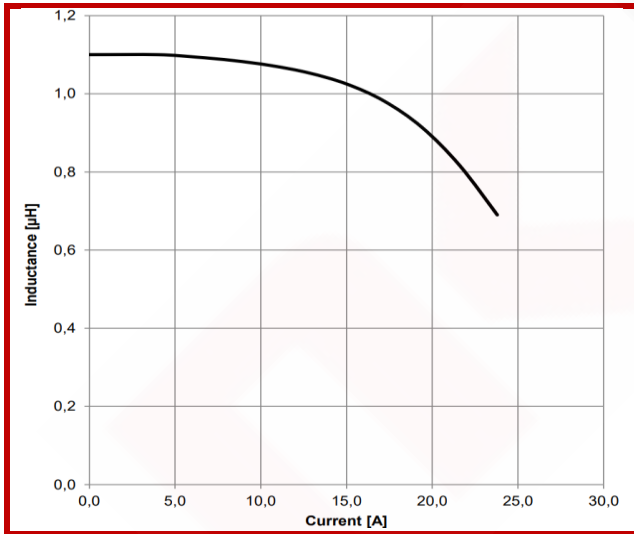
SPI07-1005-R22N



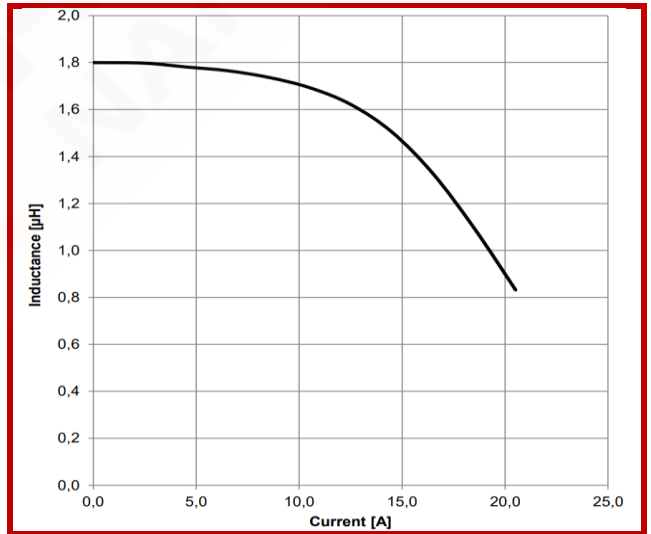
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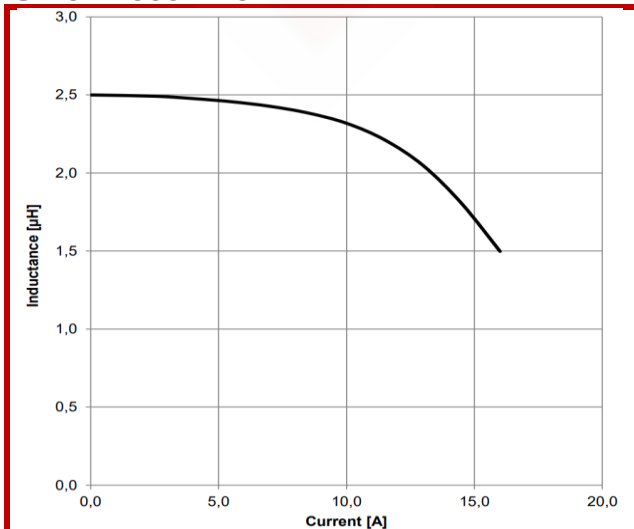
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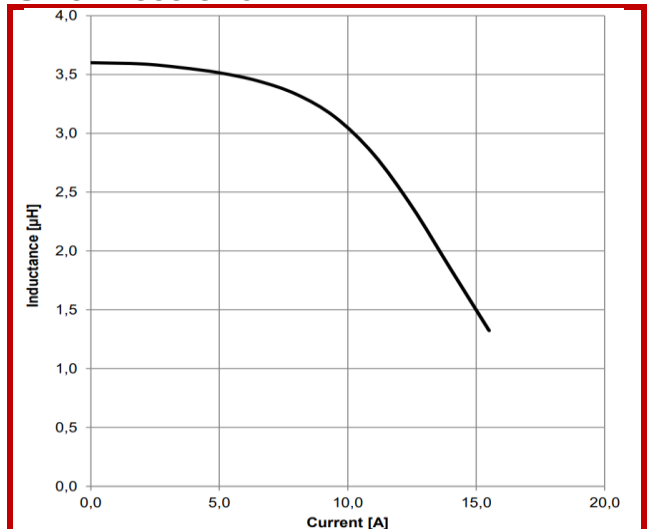
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SPI07-1005-2R5N



SPI07-1005-3R6N

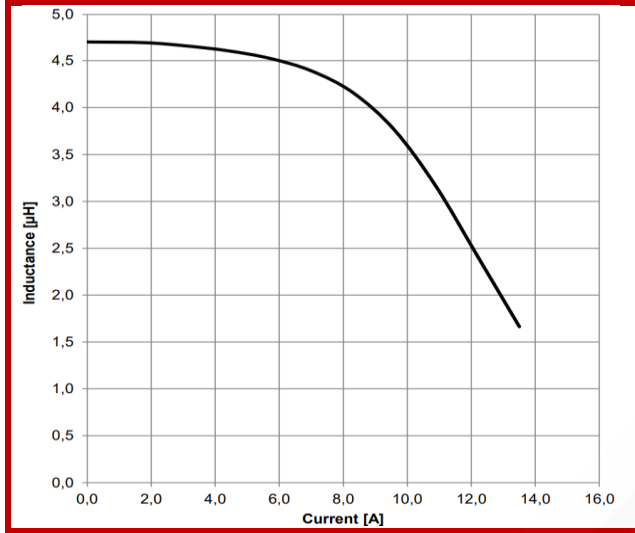




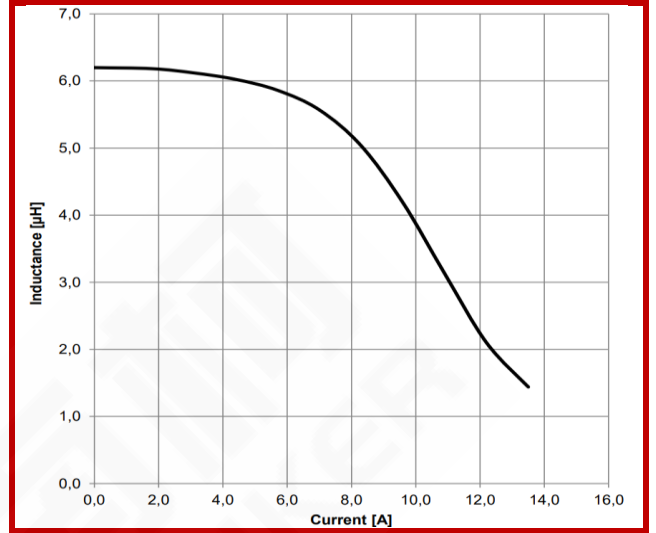
典型电感与电流特性

Typical Inductance vs. Current Characteristics

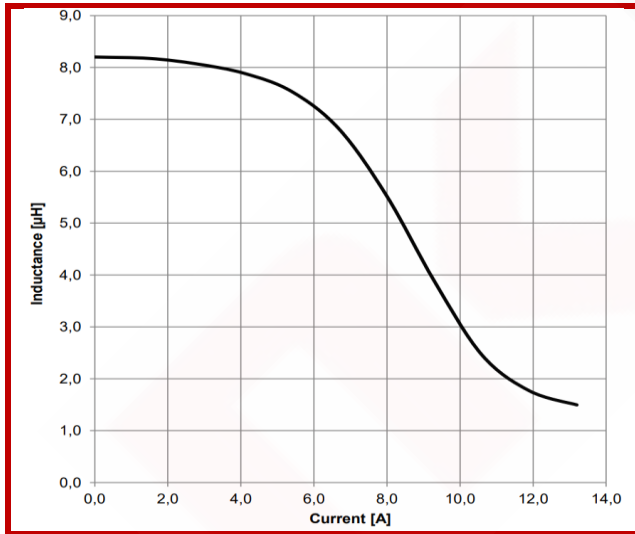
SPI07-1005-4R7N



SPI07-1005-6R2N



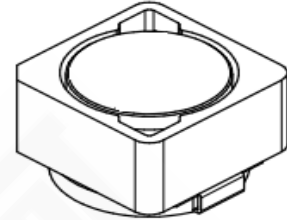
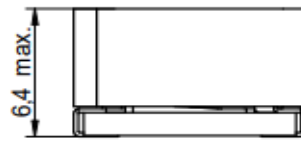
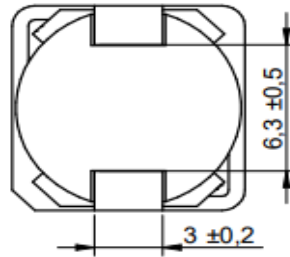
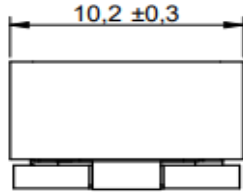
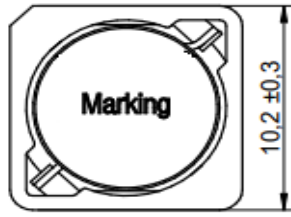
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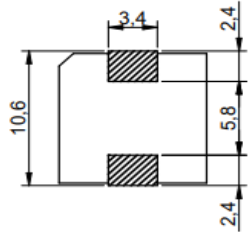
尺寸

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
SPI07-1006-R22N	0.22 ±30%	19.00	1.95	20.00	500
SPI07-1006-R50N	0.50 ±30%	18.50	2.65	18.00	500
SPI07-1006-1R1N	1.10 ±30%	16.50	3.50	16.00	500
SPI07-1006-1R8N	1.80 ±30%	14.50	4.50	12.80	500
SPI07-1006-2R5N	2.50 ±30%	13.70	4.95	10.10	500
SPI07-1006-3R6N	3.60 ±30%	12.00	5.95	8.60	500
SPI07-1006-4R7N	4.70 ±30%	9.50	8.40	7.60	500
SPI07-1006-6R2N	6.20 ±30%	9.40	9.50	6.70	500
SPI07-1006-7R2N	7.20 ±30%	7.90	12.80	6.00	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 5.0 mA

Inductance measure condition at 100 kHz/ 5.0 mA

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

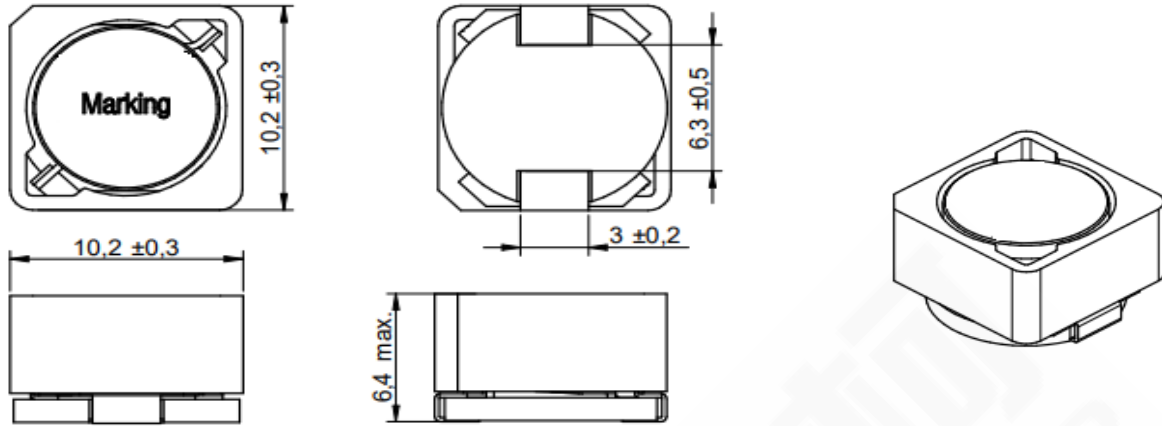
☆ 饱和电流: 电感值下降其初始值的10%时所加载的实际直流电流值

Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



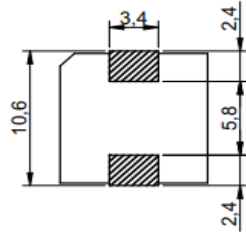
尺寸

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
SPI07-1006-9R1N	9.10 ±30%	7.35	14.35	5.40	500
SPI07-1006-110N	11.00 ±30%	6.90	15.80	5.30	500
SPI07-1006-130N	13.00 ±30%	5.85	22.50	4.50	500
SPI07-1006-150N	15.00 ±30%	5.45	25.80	4.00	500
SPI07-1006-180N	18.00 ±30%	5.00	34.40	3.80	500
SPI07-1006-220N	22.00 ±30%	4.70	37.30	3.50	500
SPI07-1006-240N	24.00 ±30%	4.50	39.50	3.25	500
SPI07-1006-270N	27.00 ±30%	4.30	42.50	3.10	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 5.0 mA

Inductance measure condition at 100 kHz/ 5.0 mA

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

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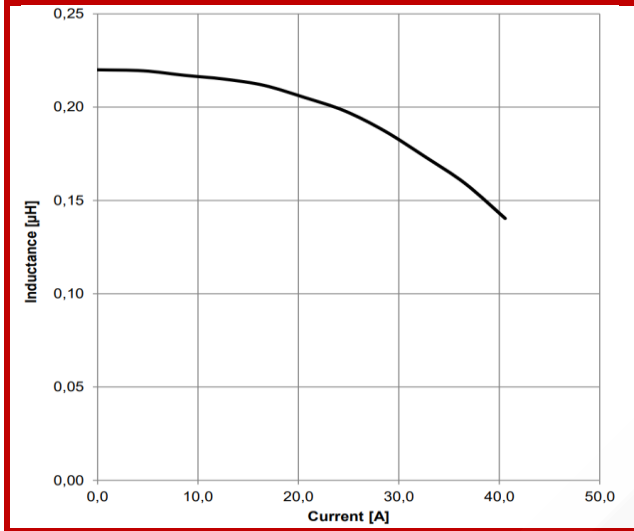
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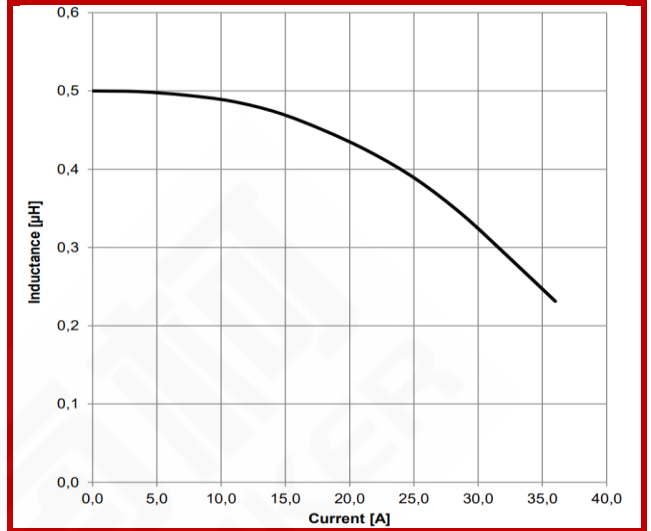
典型电感与电流特性

Typical Inductance vs. Current Characteristics

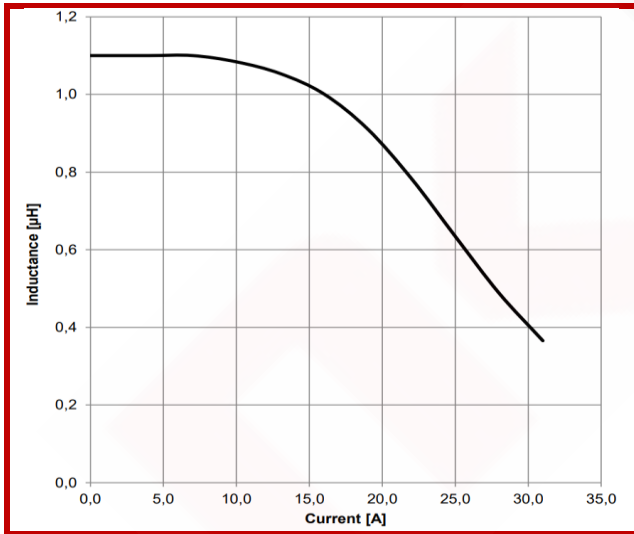
SPI07-1006-R22N



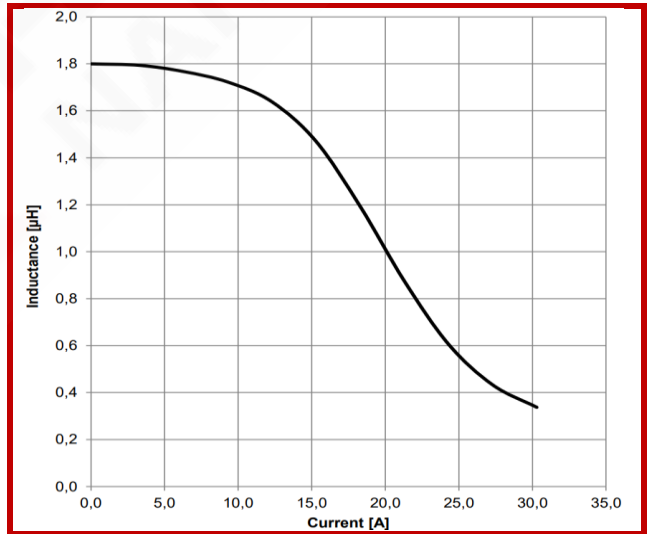
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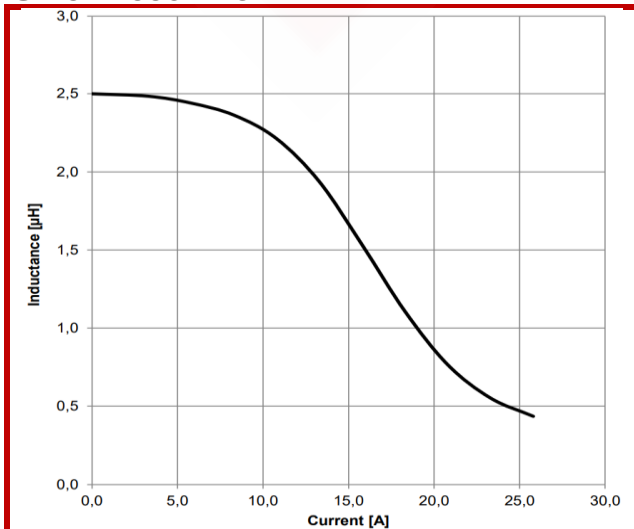
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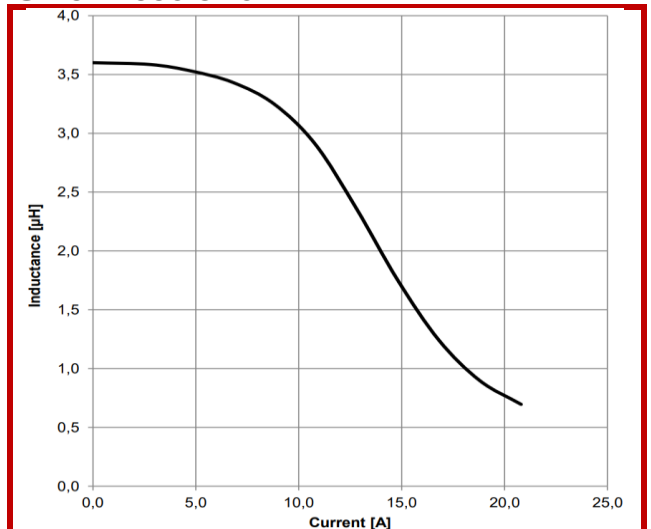
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SPI07-1006-2R5N



SPI07-1006-3R6N

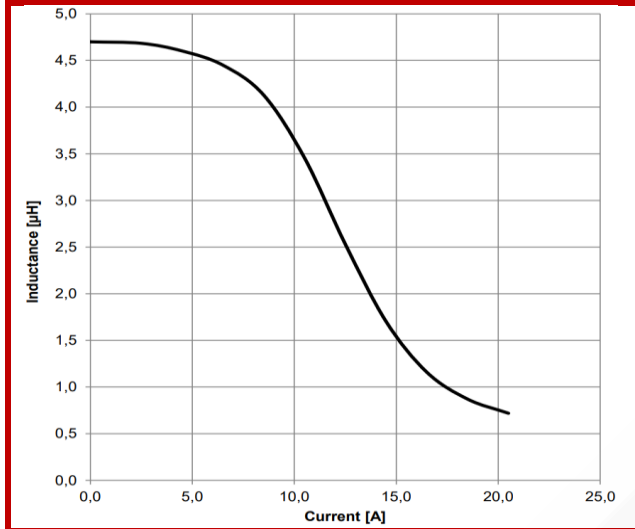




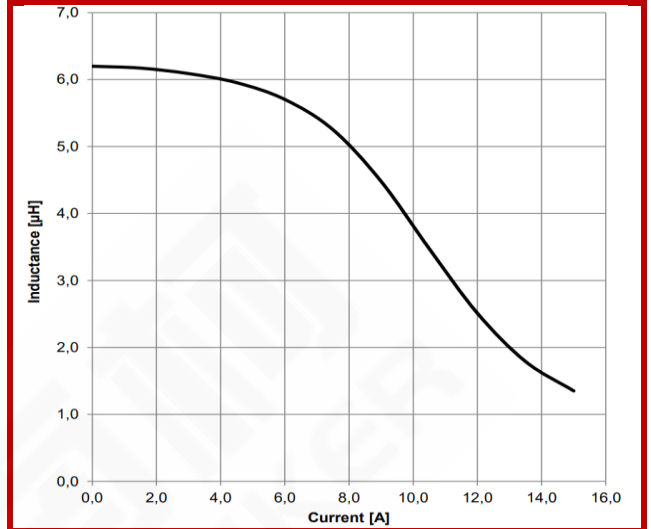
典型电感与电流特性

Typical Inductance vs. Current Characteristics

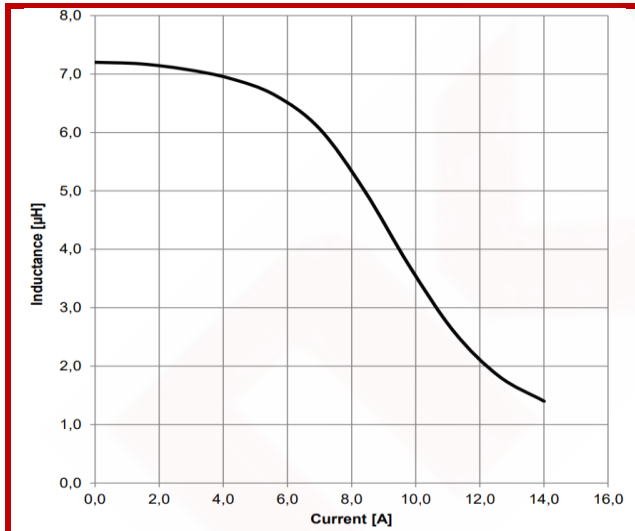
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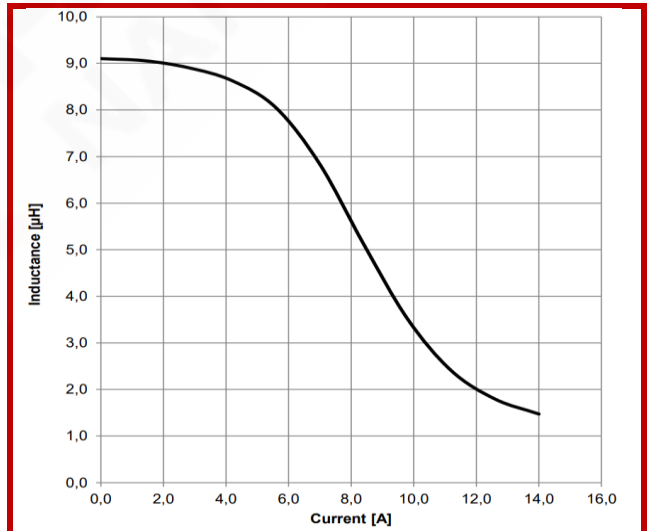
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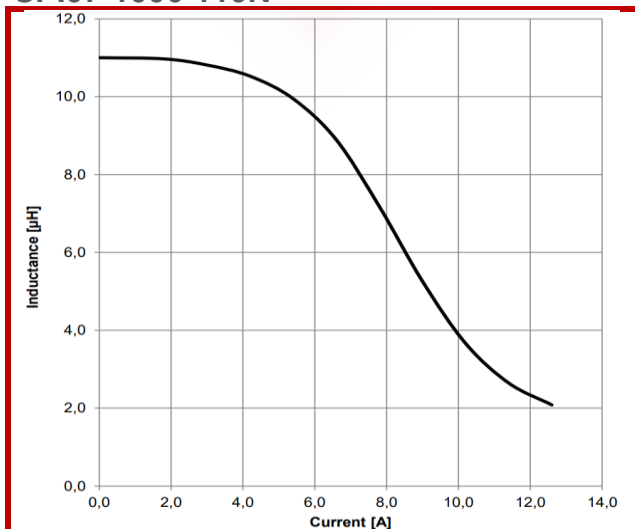
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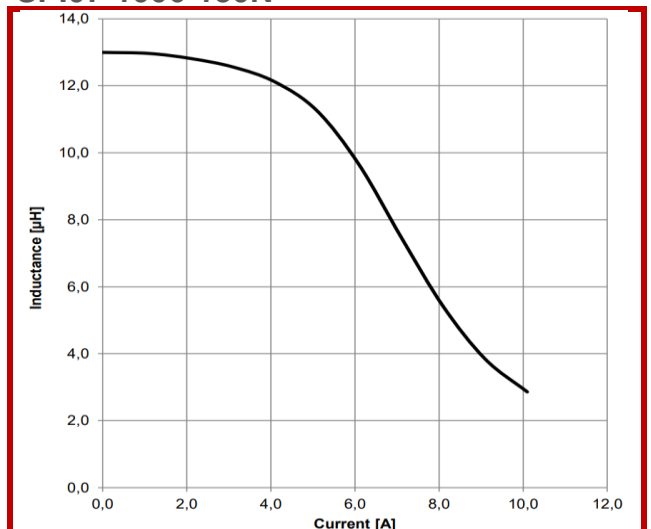
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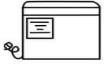


SPI07-1006-110N



SPI07-1006-130N

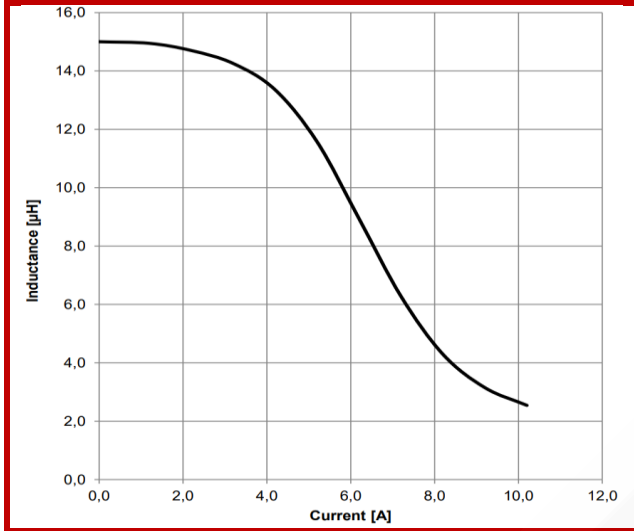




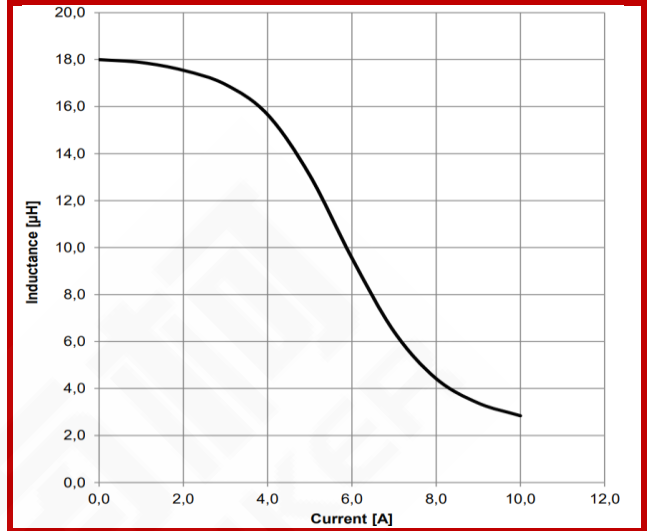
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Typical Inductance vs. Current Characteristics

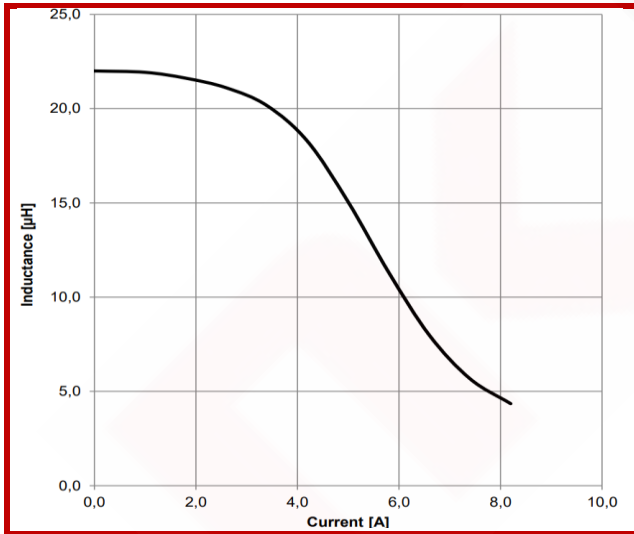
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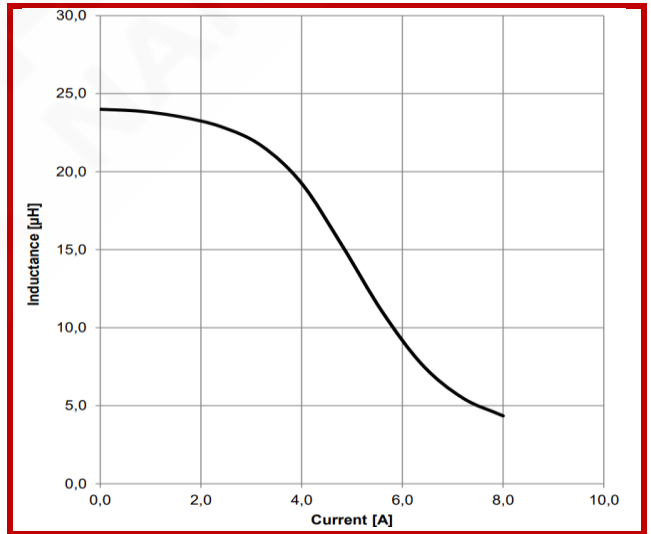
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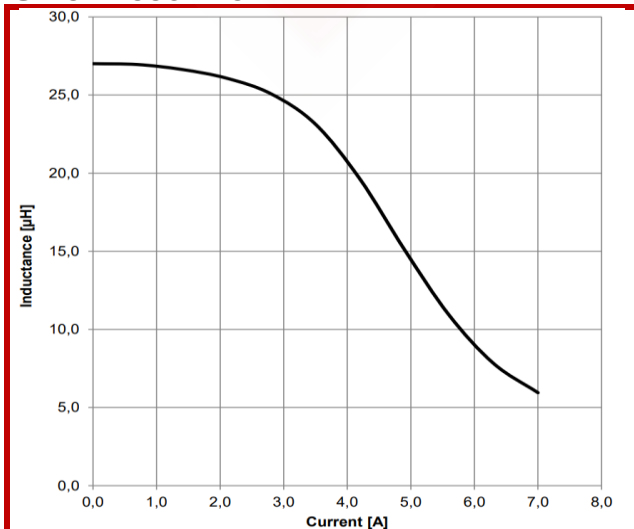
SPI07-1006-220N



SPI07-1006-240N



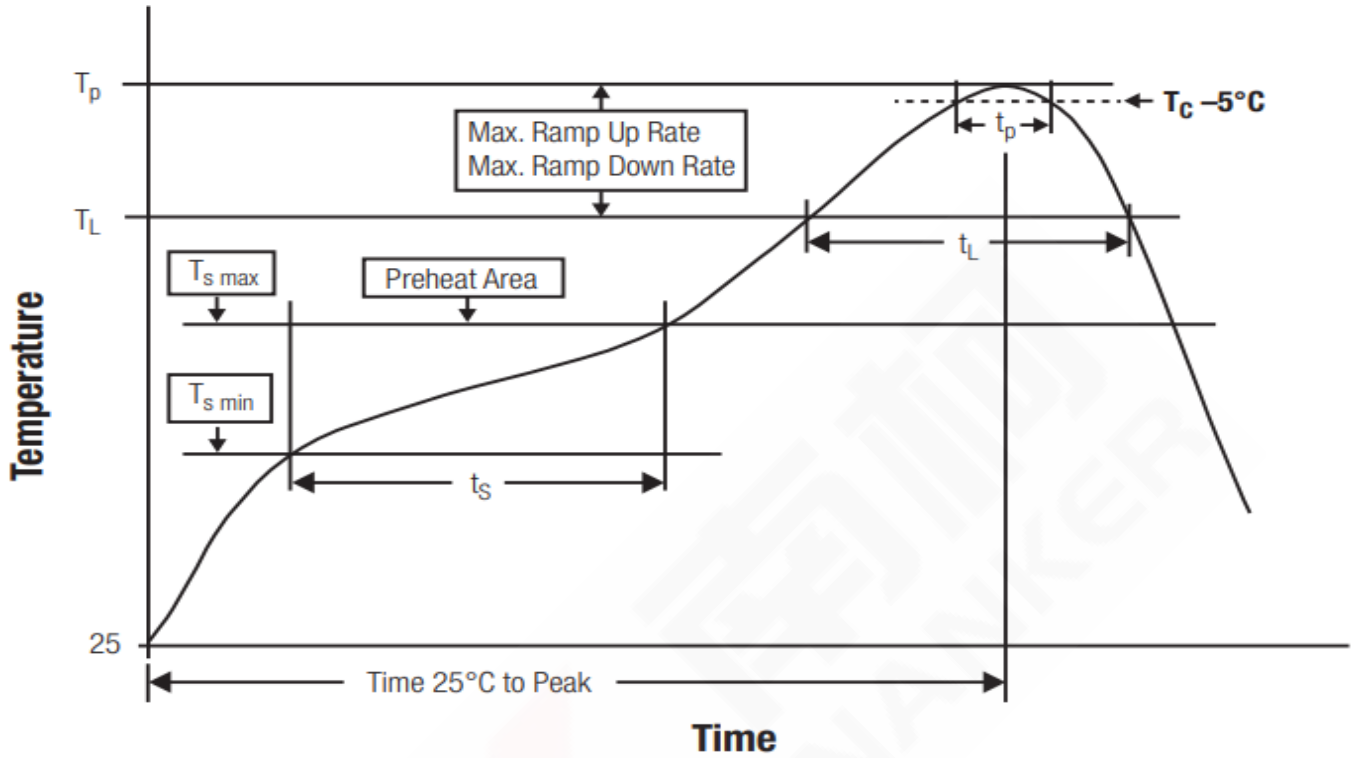
SPI07-1006-270N





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.