

磁屏蔽电感

Shielded Power Inductor (SMD)



特性

Characteristics

磁屏蔽型，可产生低漏磁场

Magnetically shielded version which results in a low leakage field

工作频率高达10 MHz

Working frequency up to 10 MHz

应用

Application

非常适合开关电源，效率极高

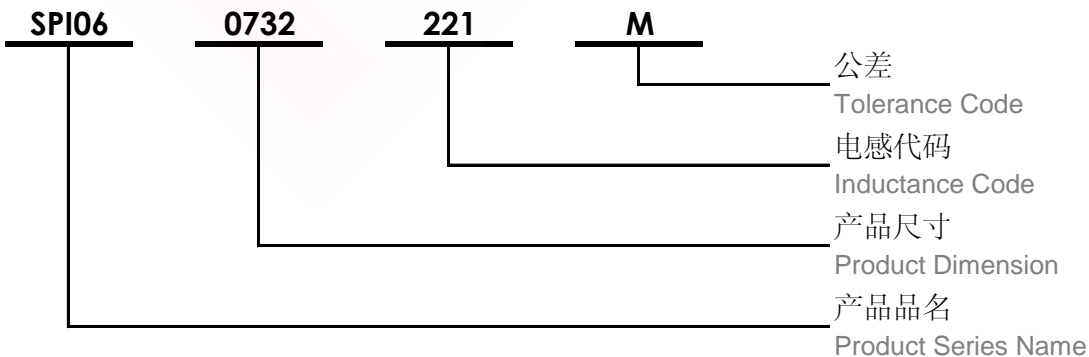
Perfectly suitable for switching regulators with extremely high efficiency

EMI滤波器，DC/DC转换器

EMI-filter, DC/DC Converter

产品品名介绍

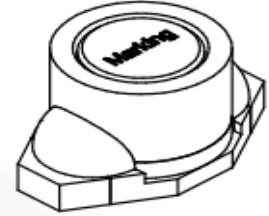
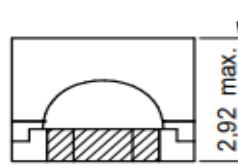
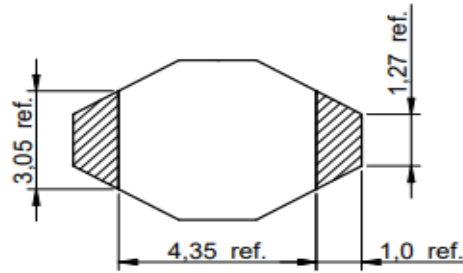
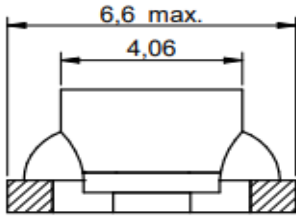
Product Number Structure





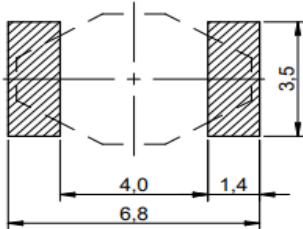
尺寸

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} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI06-0603-1R0M	1.00 ±20%	3.00	0.040	1.62	500
SPI06-0603-1R5M	1.50 ±20%	2.80	0.045	1.13	500
SPI06-0603-2R2M	2.20 ±20%	1.80	0.050	1.08	500
SPI06-0603-3R3M	3.30 ±20%	1.60	0.055	0.77	500
SPI06-0603-3R9M	3.90 ±20%	1.50	0.057	0.77	500
SPI06-0603-4R7M	4.70 ±20%	1.40	0.060	0.72	500
SPI06-0603-6R8M	6.80 ±20%	1.20	0.075	0.50	500
SPI06-0603-100M	10.00 ±20%	1.00	0.090	0.45	500
SPI06-0603-150M	15.00 ±20%	0.80	0.110	0.27	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mV

Inductance measure condition at 100 kHz/ 100 mV

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

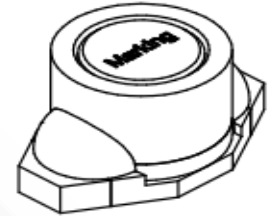
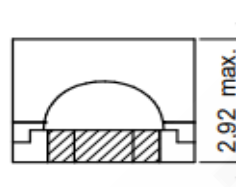
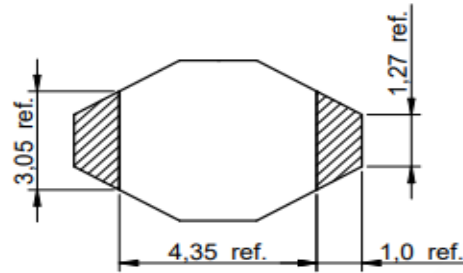
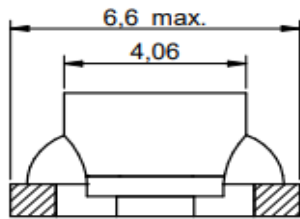
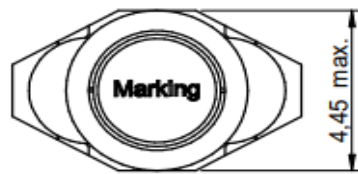
☆ 饱和电流: 电感值下降其初始值的10%时所加载的实际直流电流值

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



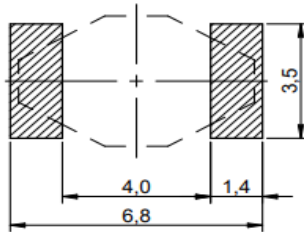
尺寸

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} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI06-0603-220M	22 ±20%	0.70	0.110	0.16	500
SPI06-0603-330M	33 ±20%	0.60	0.190	0.15	500
SPI06-0603-470M	47 ±20%	0.50	0.230	0.14	500
SPI06-0603-680M	68 ±20%	0.40	0.290	0.12	500
SPI06-0603-101M	100 ±20%	0.30	0.480	0.09	500
SPI06-0603-151M	150 ±20%	0.26	0.590	0.05	500
SPI06-0603-221M	220 ±20%	0.22	0.770	0.08	500
SPI06-0603-331M	330 ±20%	0.20	1.400	0.02	500
SPI06-0603-471M	470 ±20%	0.19	1.800	0.02	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mV

Inductance measure condition at 100 kHz/ 100 mV

☆ 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

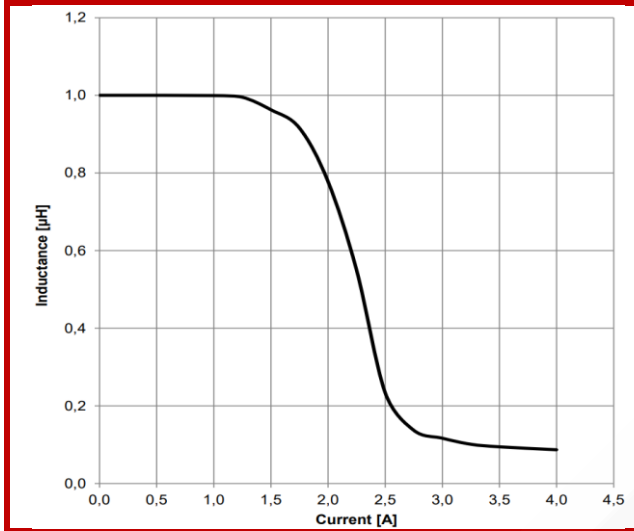
Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



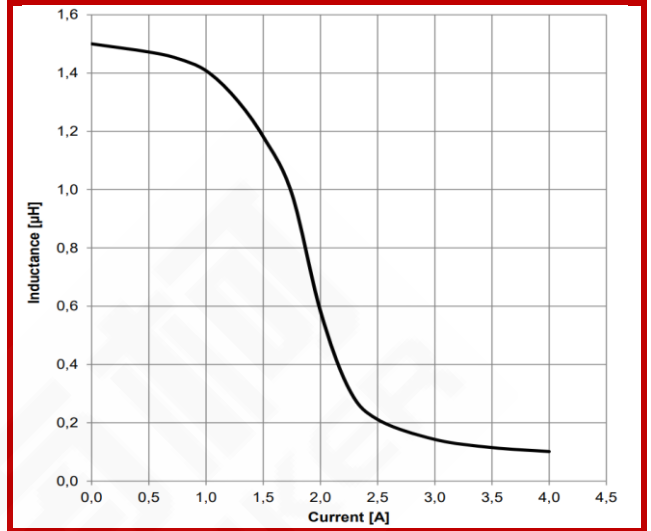
典型电感与电流特性

Typical Inductance vs. Current Characteristics

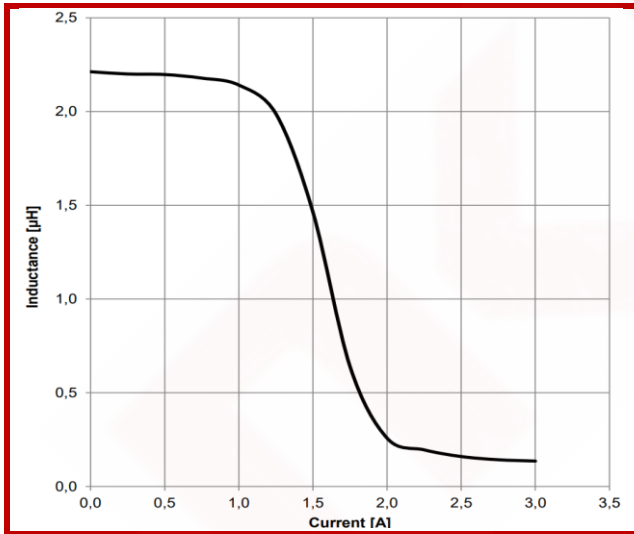
SPI06-0603-1R0M



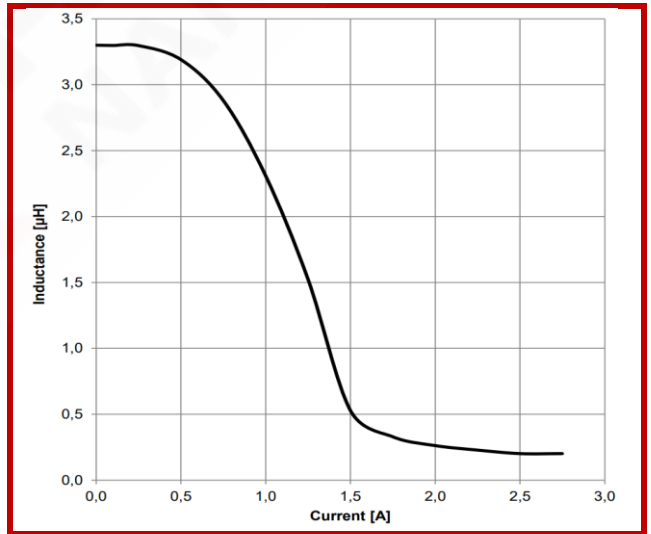
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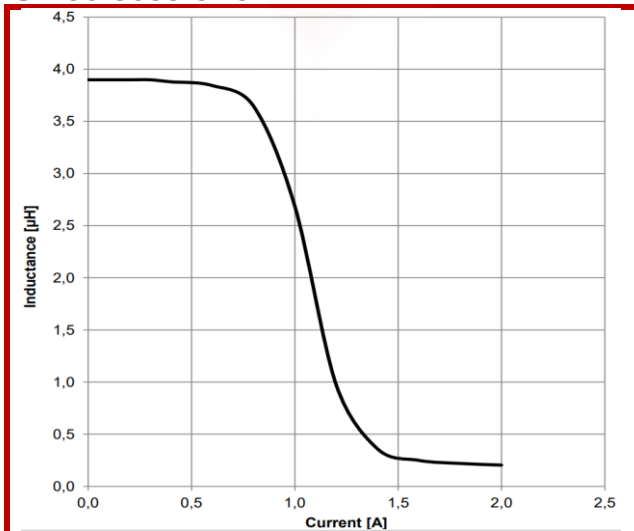
SPI06-0603-2R2M



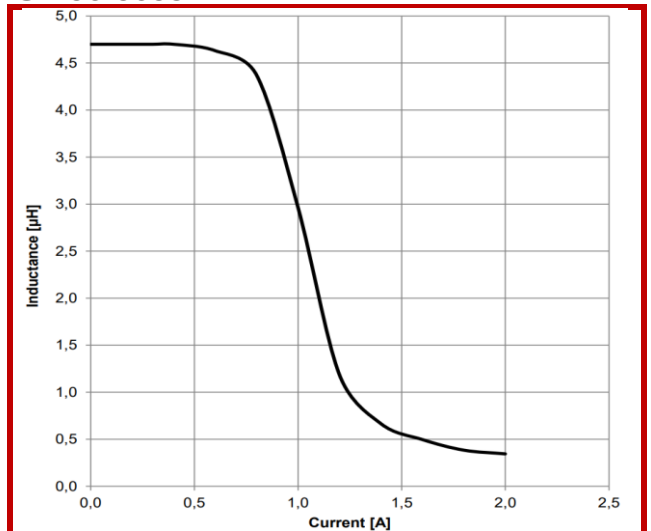
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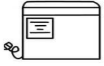


SPI06-0603-3R9M



SPI06-0603-4R7M

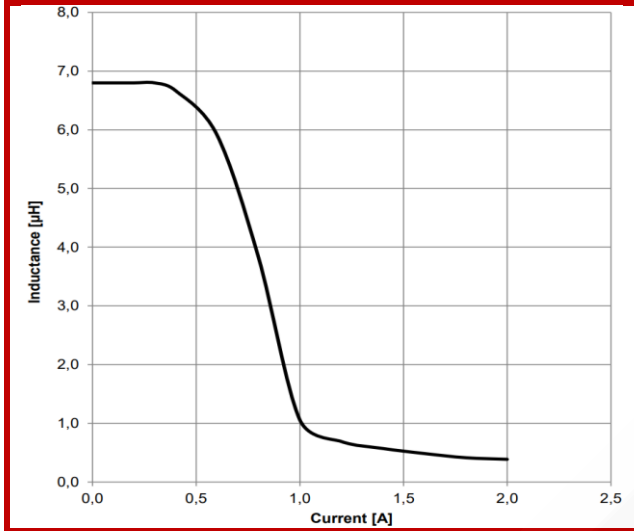




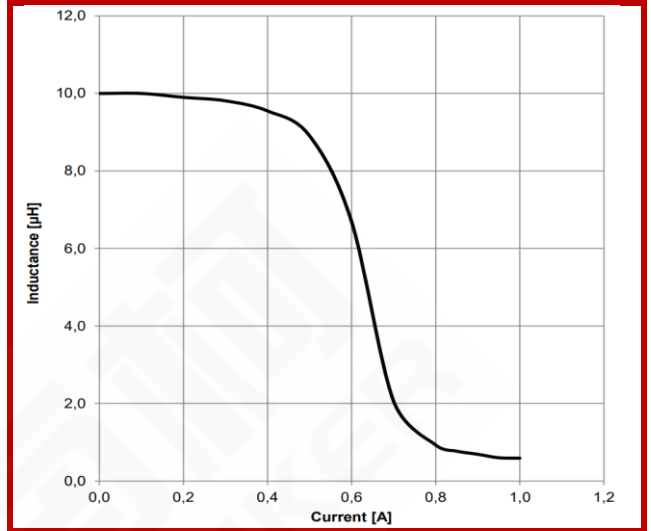
典型电感与电流特性

Typical Inductance vs. Current Characteristics

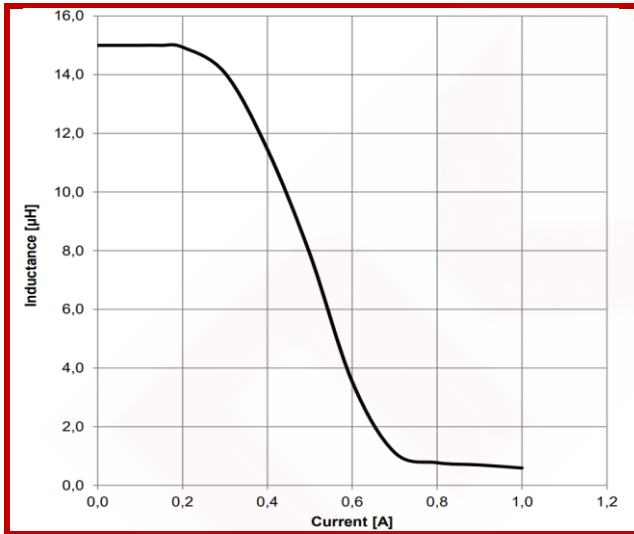
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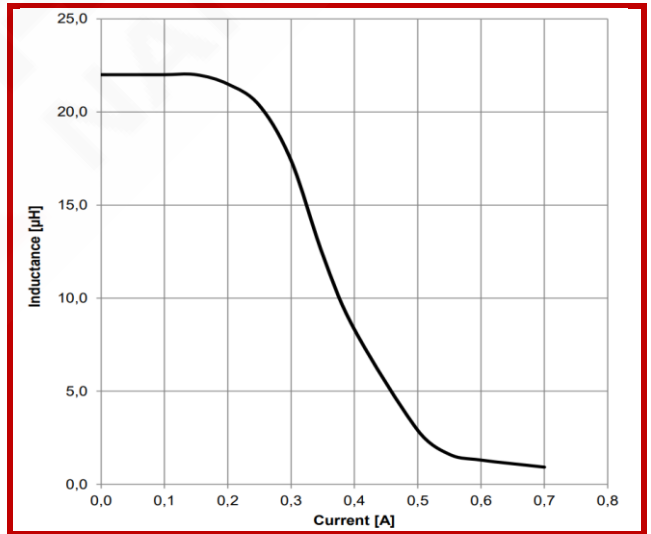
SPI06-0603-100M



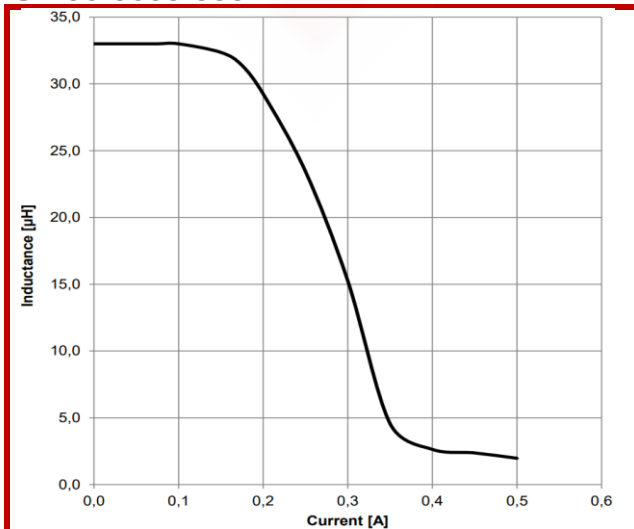
SPI06-0603-150M



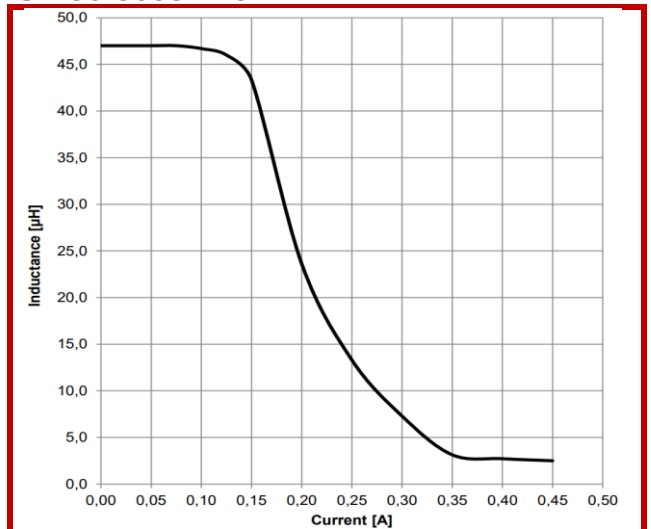
SPI06-0603-220M



SPI06-0603-330M



SPI06-0603-470M

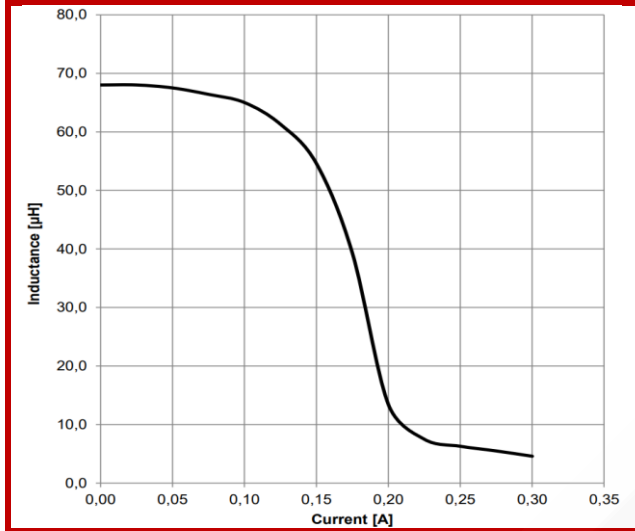




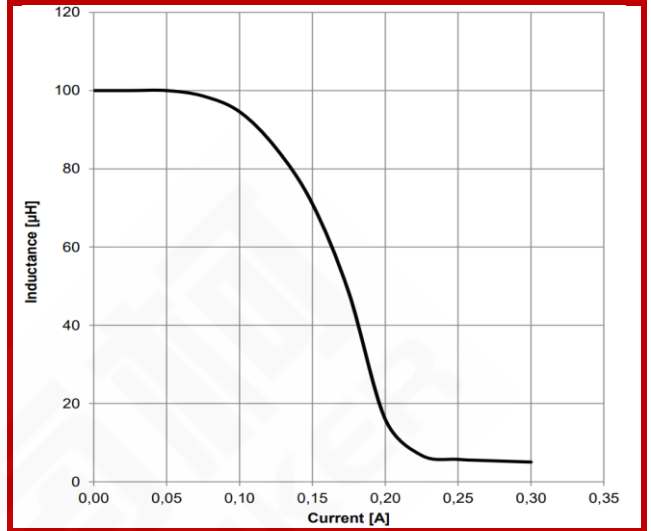
典型电感与电流特性

Typical Inductance vs. Current Characteristics

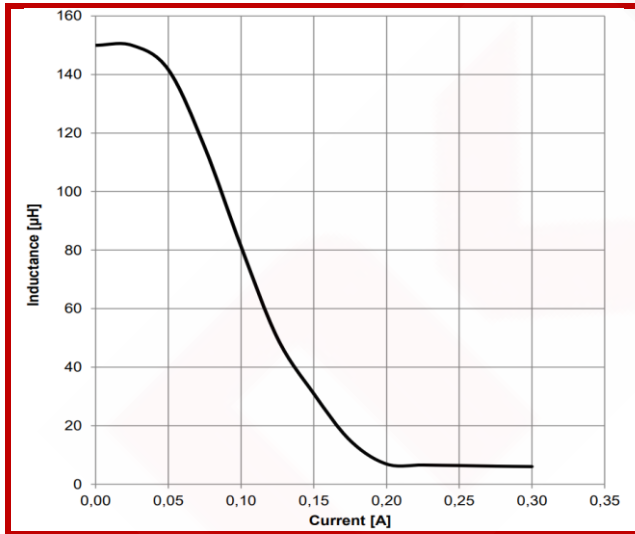
SPI06-0603-680M



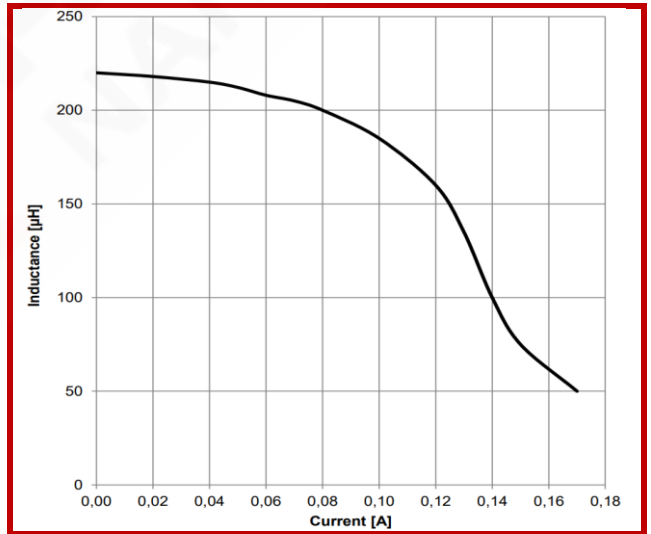
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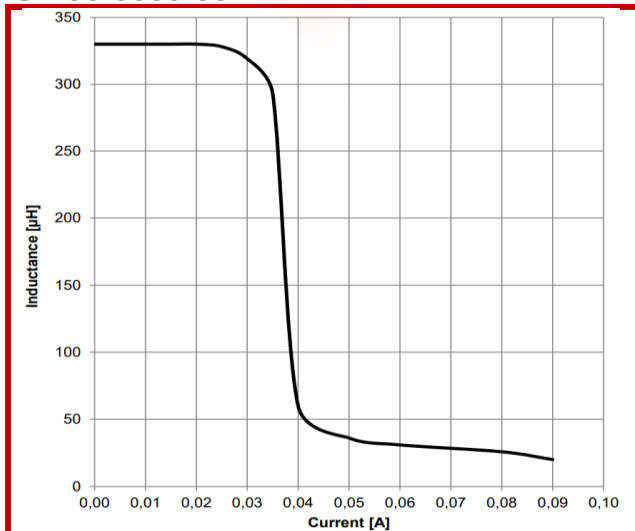
SPI06-0603-151M



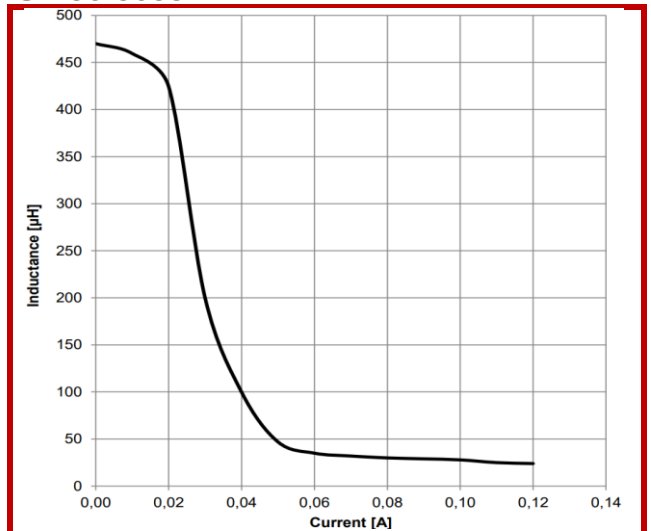
SPI06-0603-221M



SPI06-0603-331M



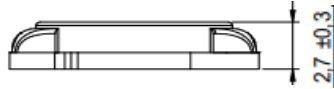
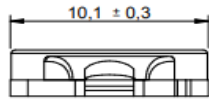
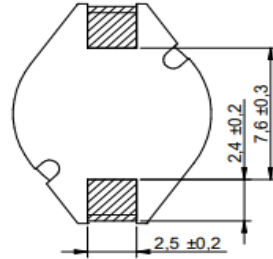
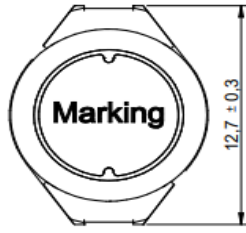
SPI06-0603-471M





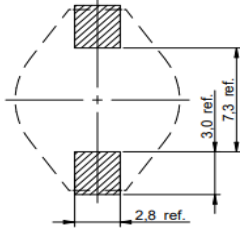
尺寸

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
SPI06-1303-1R5M	1.50 ±20%	3.00	0.038	6.30	500
SPI06-1303-2R2M	2.20 ±20%	2.76	0.045	6.00	500
SPI06-1303-3R3M	3.30 ±20%	2.20	0.062	5.40	500
SPI06-1303-3R9M	3.90 ±20%	2.10	0.070	4.20	500
SPI06-1303-4R7M	4.70 ±20%	1.90	0.078	3.60	500
SPI06-1303-6R8M	6.80 ±20%	1.60	0.085	3.30	500
SPI06-1303-100M	10.00 ±20%	1.24	0.145	2.90	500
SPI06-1303-120M	12.00 ±20%	1.10	0.185	2.70	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mv

Inductance measure condition at 100 kHz/ 100 mV

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

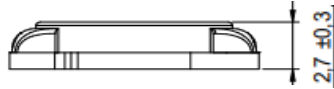
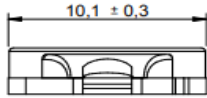
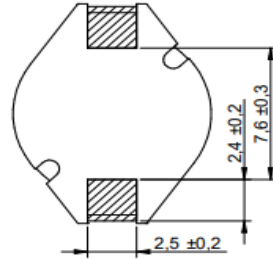
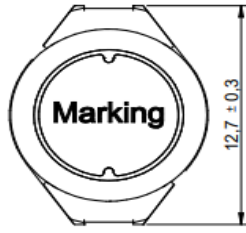
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Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



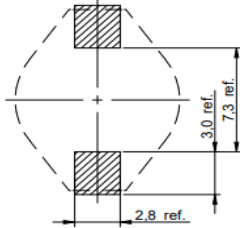
尺寸

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} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI06-1303-150M	15.00 ±20%	1.00	0.170	2.30	500
SPI06-1303-220M	22.00 ±20%	0.80	0.248	1.90	500
SPI06-1303-330M	33.00 ±20%	0.70	0.371	1.40	500
SPI06-1303-470M	47.00 ±20%	0.60	0.481	1.30	500
SPI06-1303-560M	56.00 ±20%	0.52	0.552	1.20	500
SPI06-1303-680M	68.00 ±20%	0.48	0.620	1.10	500
SPI06-1303-820M	82.00 ±20%	0.42	1.030	0.90	500
SPI06-1303-101M	100.00 ±20%	0.40	1.164	0.70	500

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mv

Inductance measure condition at 100 kHz/ 100 mV

☆ 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

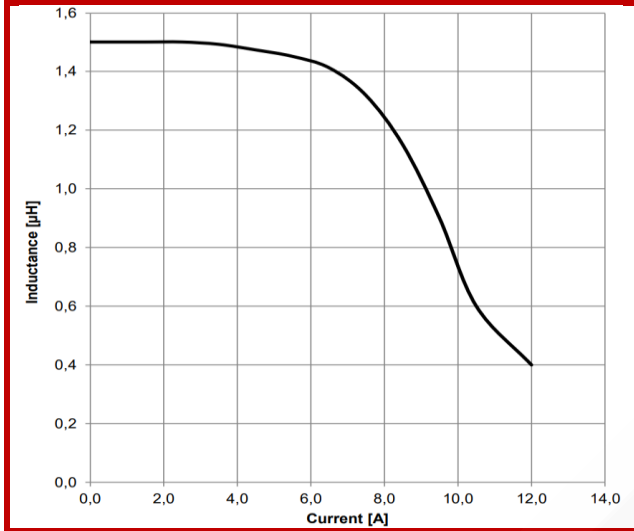
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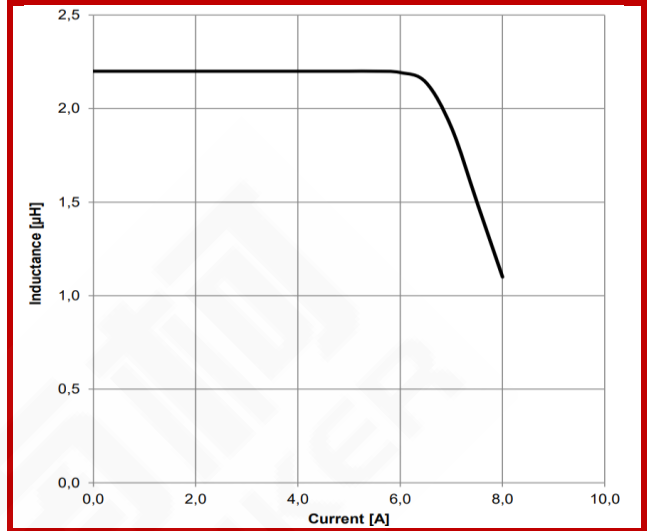
典型电感与电流特性

Typical Inductance vs. Current Characteristics

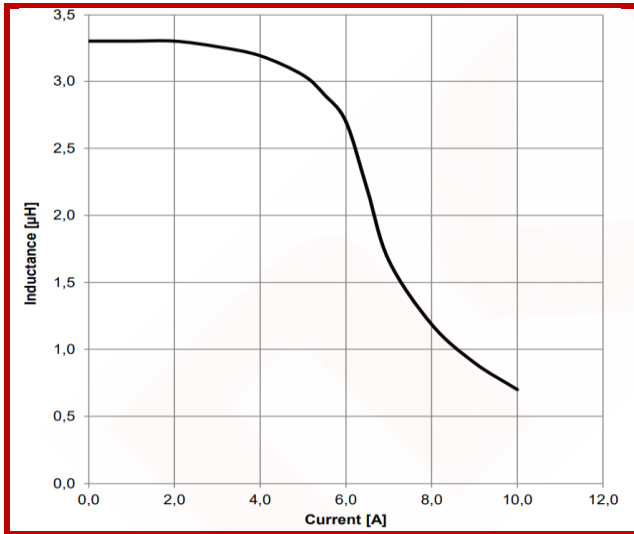
SPI06-1303-1R5M



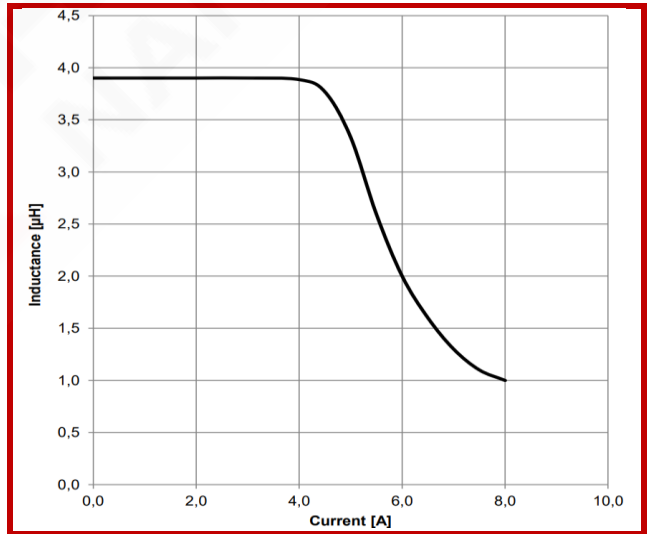
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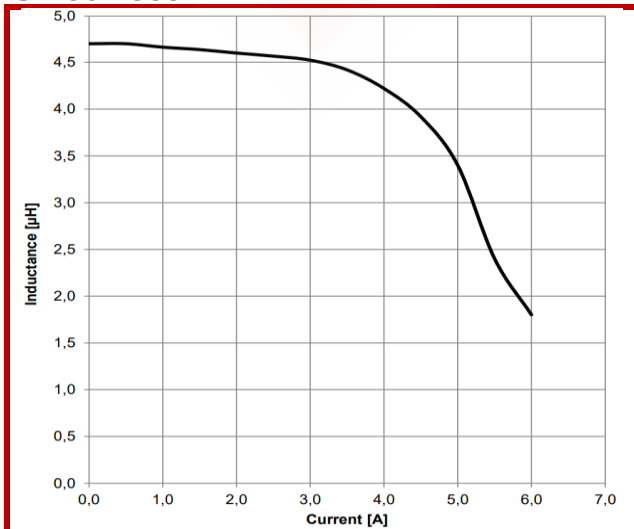
SPI06-1303-3R3M



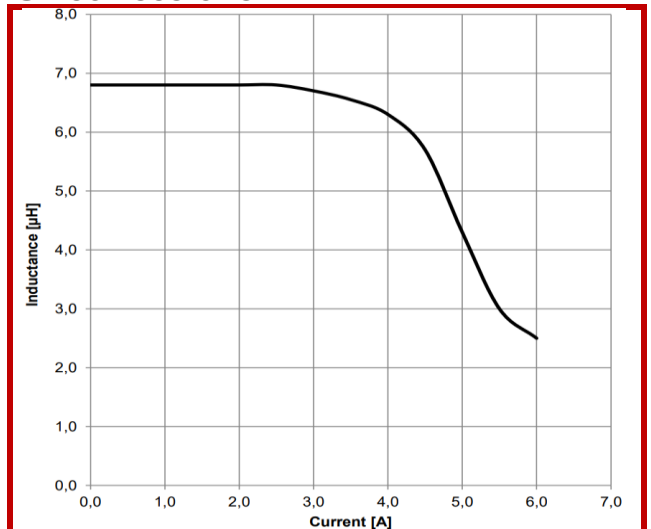
SPI06-1303-3R9M



SPI06-1303-4R7M



SPI06-1303-6R8M

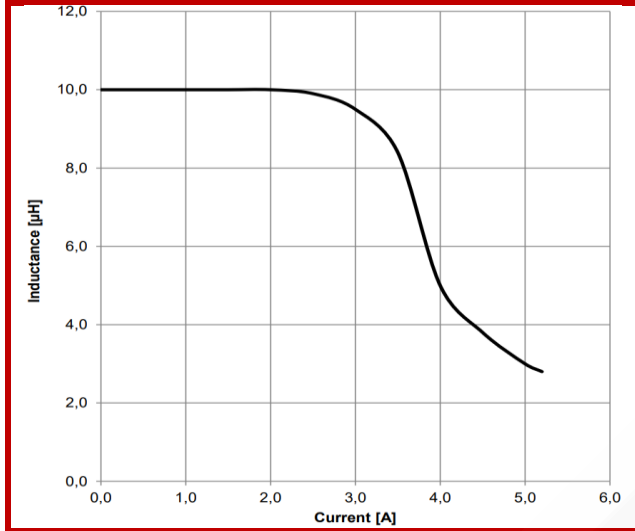




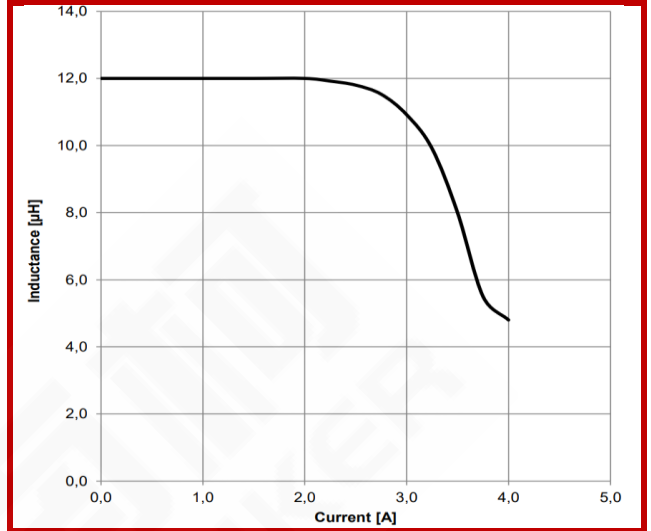
典型电感与电流特性

Typical Inductance vs. Current Characteristics

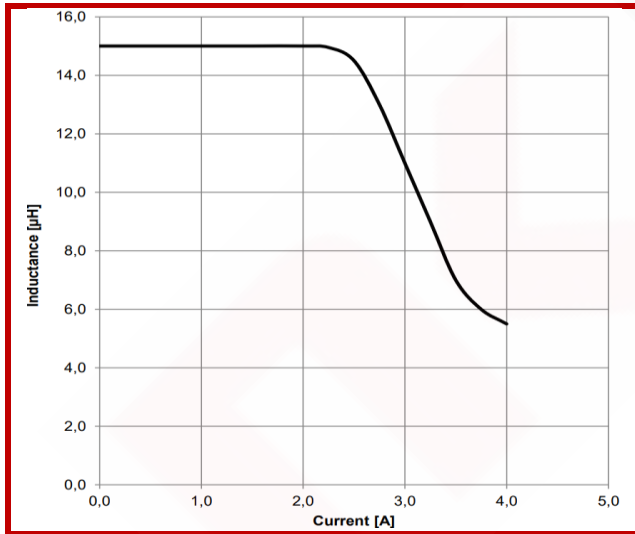
SPI06-1303-100M



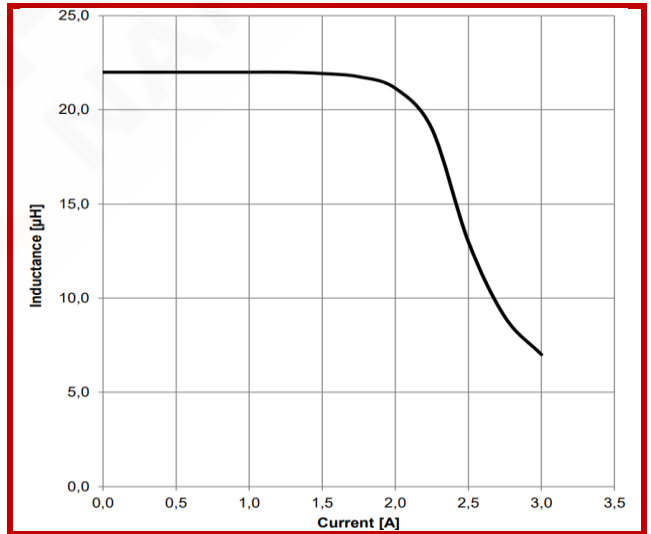
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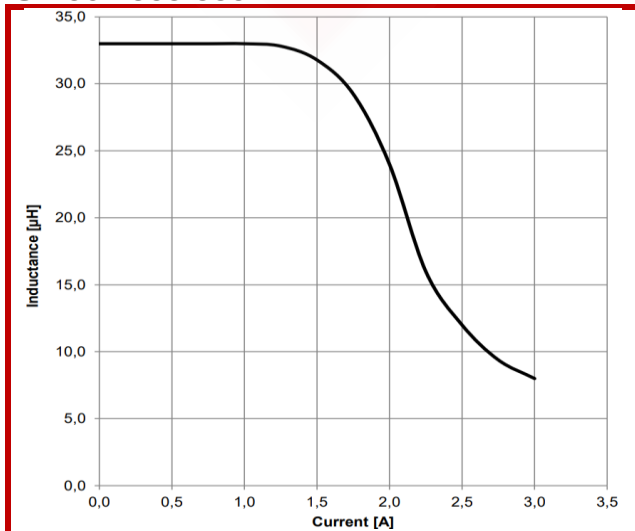
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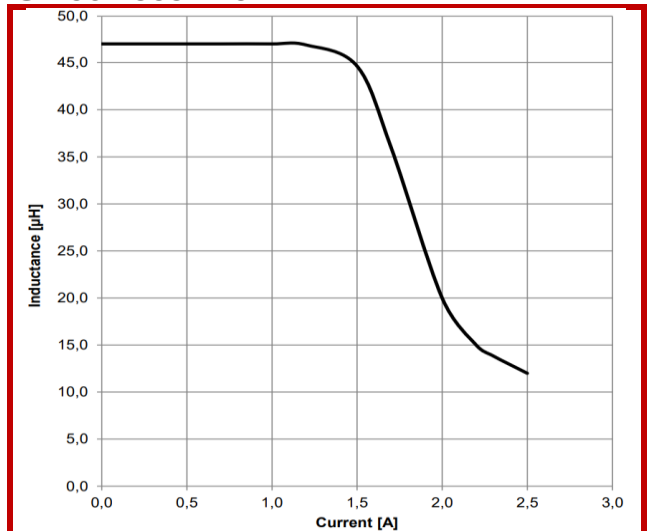
SPI06-1303-220M



SPI06-1303-330M



SPI06-1303-470M

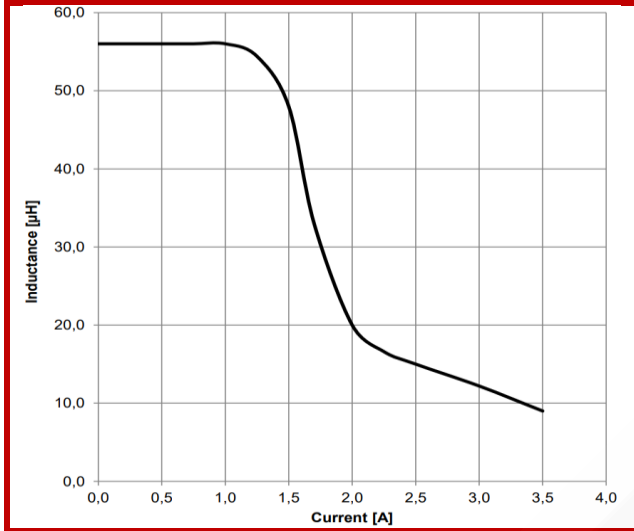




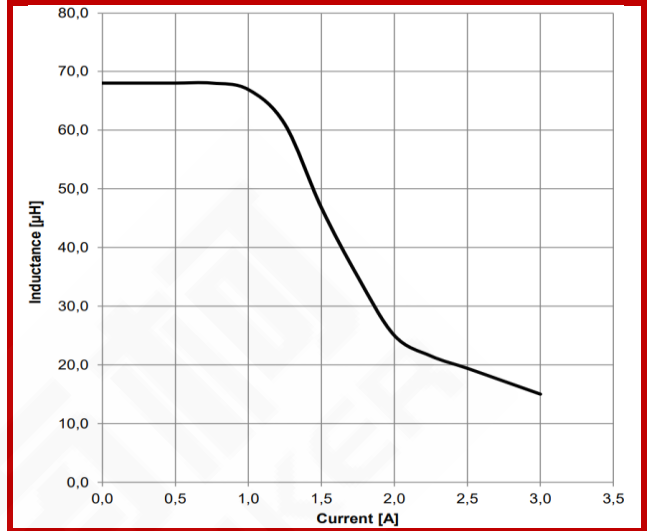
典型电感与电流特性

Typical Inductance vs. Current Characteristics

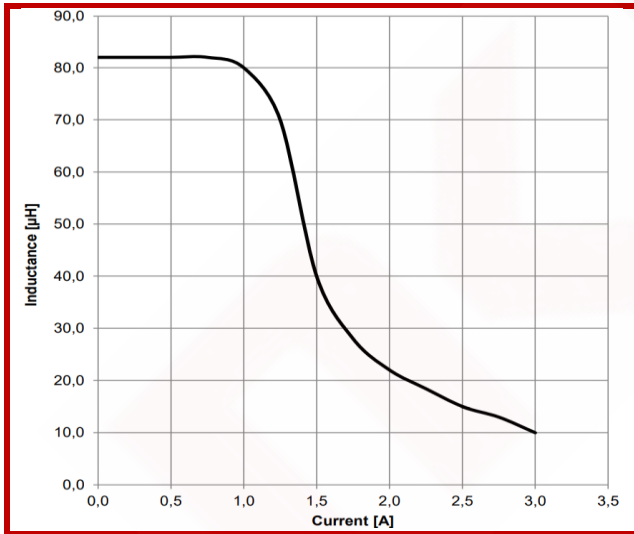
SPI06-1303-560M



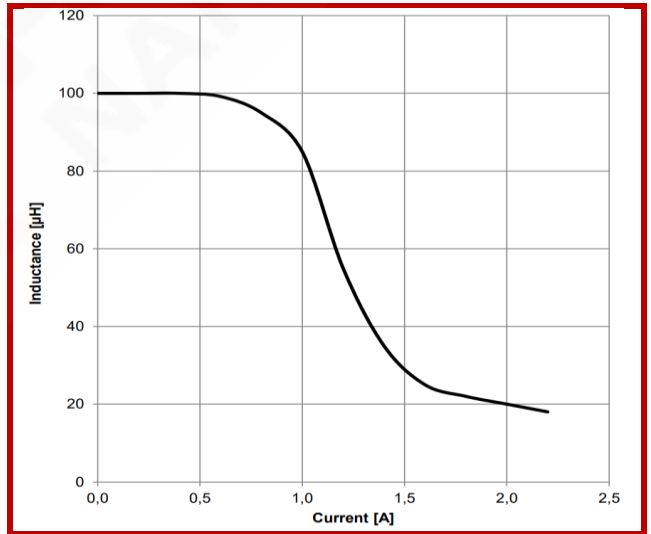
SPI06-1303-680M



SPI06-1303-820M



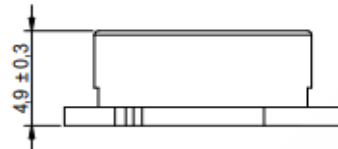
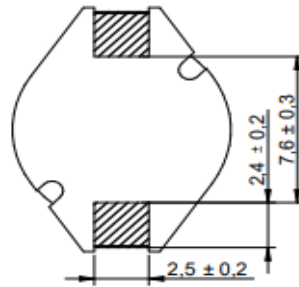
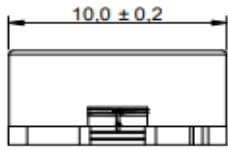
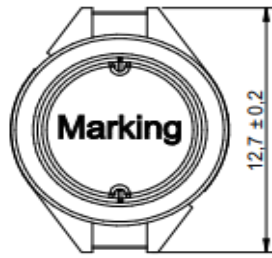
SPI06-1303-101M





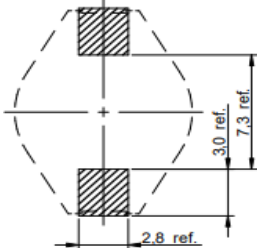
尺寸

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
SPI06-1305-2R2M	2.20 ±20%	3.80	0.027	2.30	600
SPI06-1305-3R0M	3.00 ±20%	2.90	0.030	1.90	600
SPI06-1305-4R7M	4.70 ±20%	2.70	0.040	1.40	600
SPI06-1305-7R0M	7.00 ±20%	2.20	0.055	1.30	600
SPI06-1305-100M	10.00 ±20%	2.00	0.065	1.20	600
SPI06-1305-150M	15.00 ±20%	1.70	0.085	1.10	600
SPI06-1305-220M	22.00 ±20%	1.40	0.100	0.90	600
SPI06-1305-330M	33.00 ±20%	1.20	0.160	0.70	600
SPI06-1305-470M	47.00 ±20%	1.00	0.190	0.90	600

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mV

Inductance measure condition at 100 kHz/ 100 mV

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

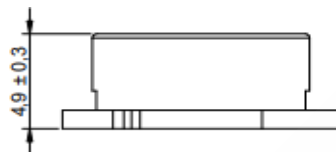
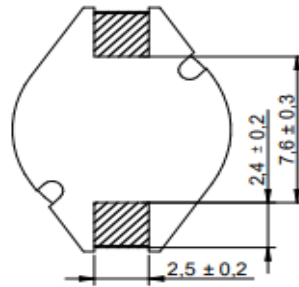
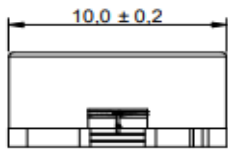
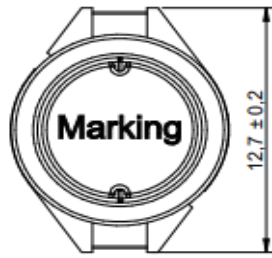
☆ 饱和电流: 电感值下降其初始值的10%时所加载的实际直流电流值

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



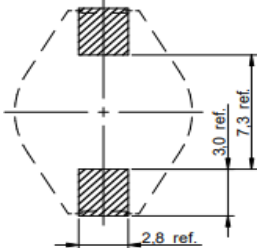
尺寸

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} (Ω)	饱和电流 Saturation Current I _{sat} typ (A)	卷盘数量 Taping Reel Qty. pcs
SPI06-1305-680M	68 ±20%	0.82	0.340	1.35	600
SPI06-1305-101M	100 ±20%	0.68	0.420	1.10	600
SPI06-1305-151M	150 ±20%	0.55	0.520	0.80	600
SPI06-1305-221M	220 ±20%	0.45	0.800	0.70	600
SPI06-1305-331M	330 ±20%	0.35	1.200	0.60	600
SPI06-1305-391M	390 ±20%	0.33	1.400	0.55	600
SPI06-1305-471M	470 ±20%	0.30	1.600	0.50	600
SPI06-1305-681M	680 ±20%	0.26	2.300	0.40	600
SPI06-1305-102M	1,000 ±20%	0.22	3.200	0.35	600

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mV

Inductance measure condition at 100 kHz/ 100 mV

☆ 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

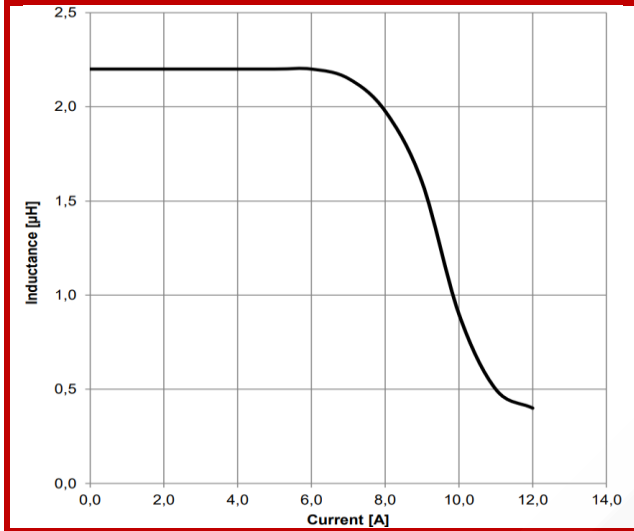
Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



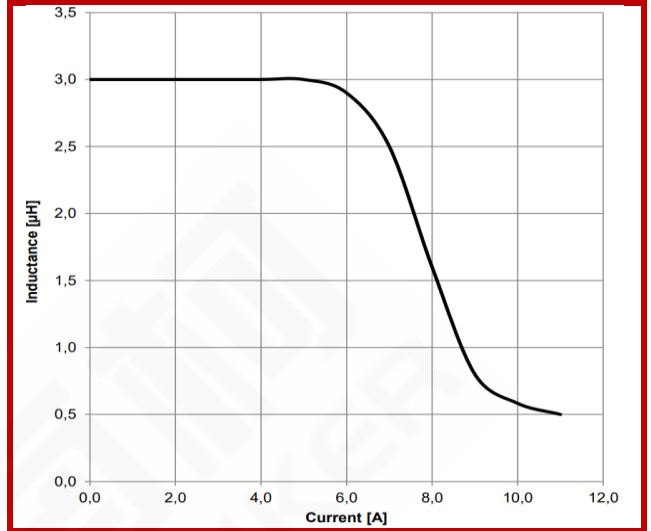
典型电感与电流特性

Typical Inductance vs. Current Characteristics

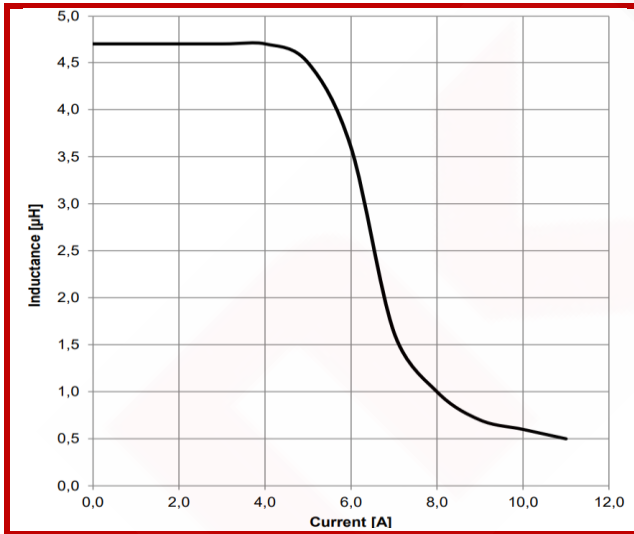
SPI06-1305-2R2M



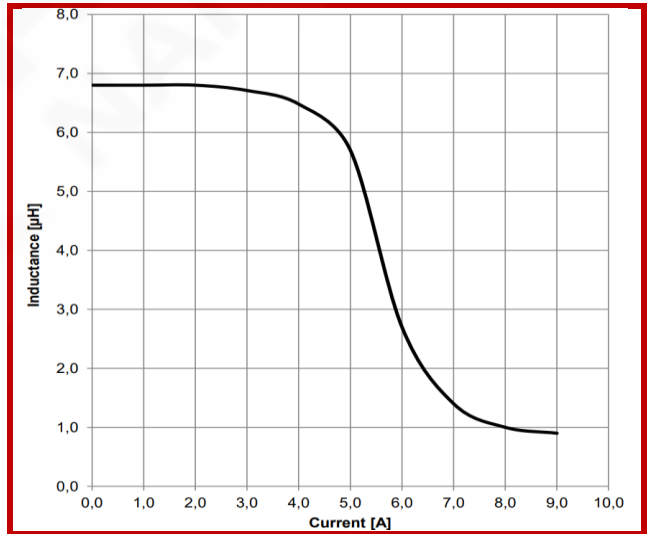
SPI06-1305-3R0M



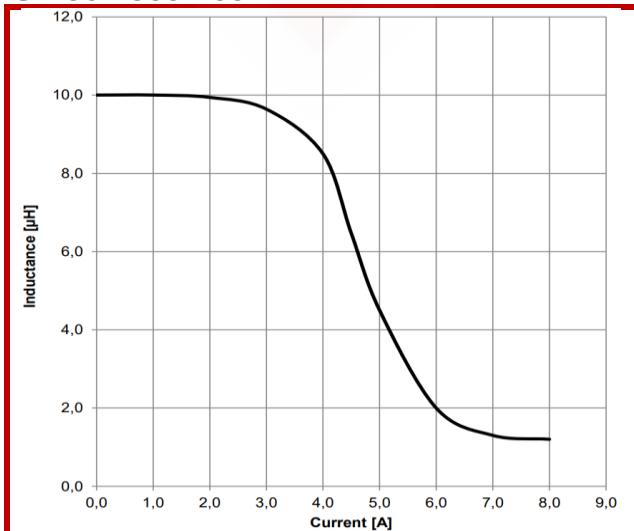
SPI06-1305-4R7M



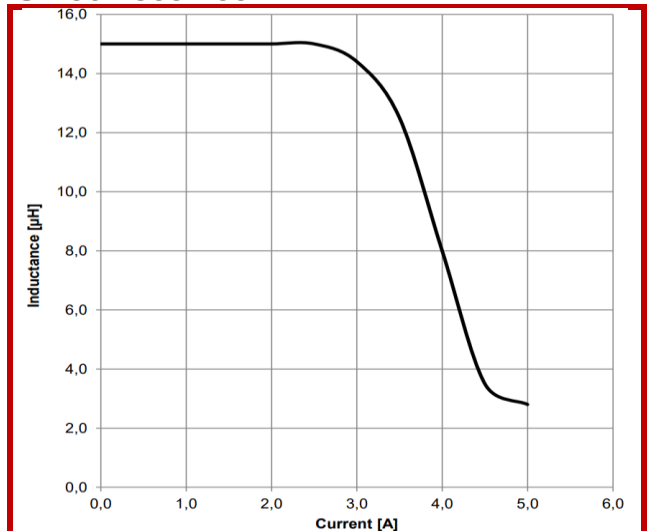
SPI06-1305-7R0M



SPI06-1305-100M



SPI06-1305-150M

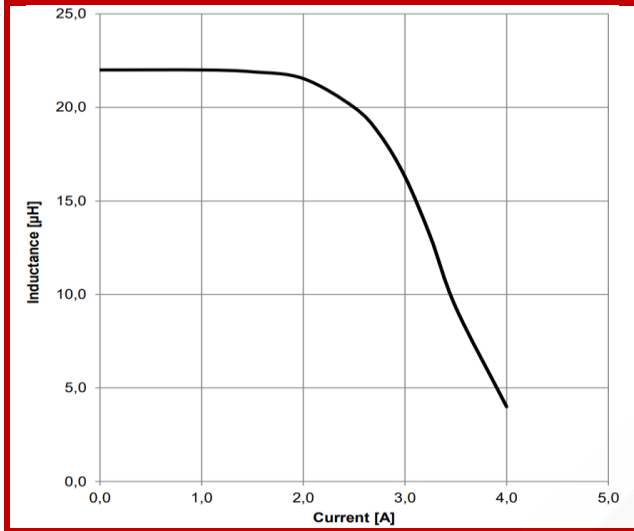




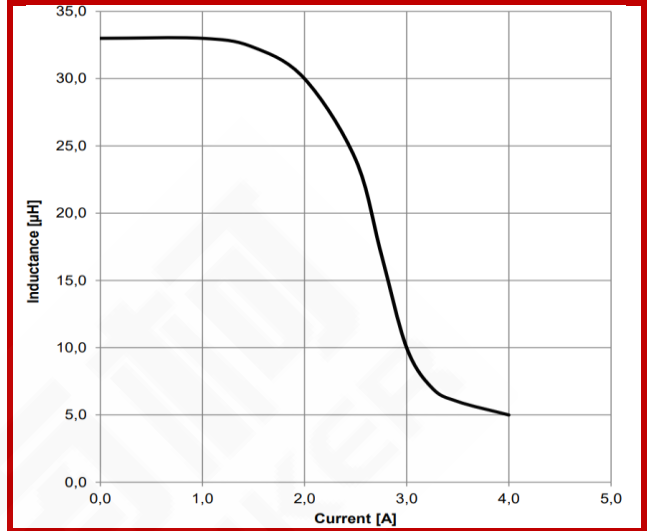
典型电感与电流特性

Typical Inductance vs. Current Characteristics

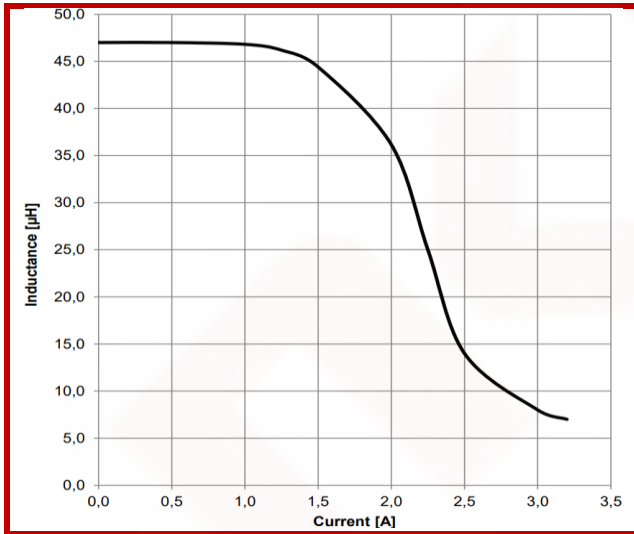
SPI06-1305-220M



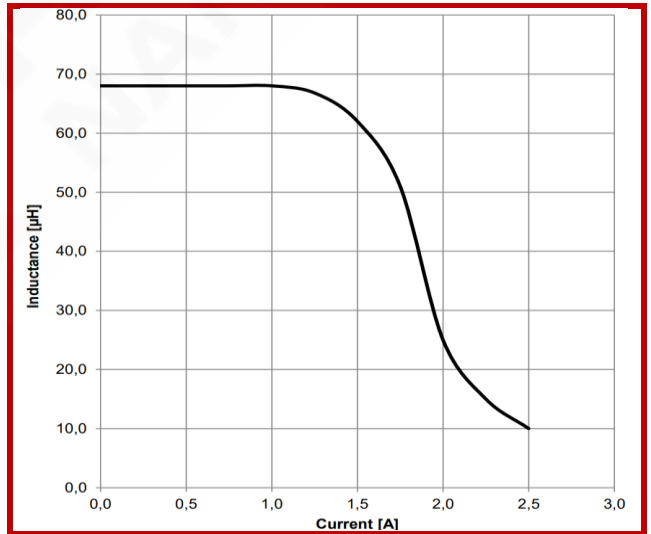
SPI06-1305-330M



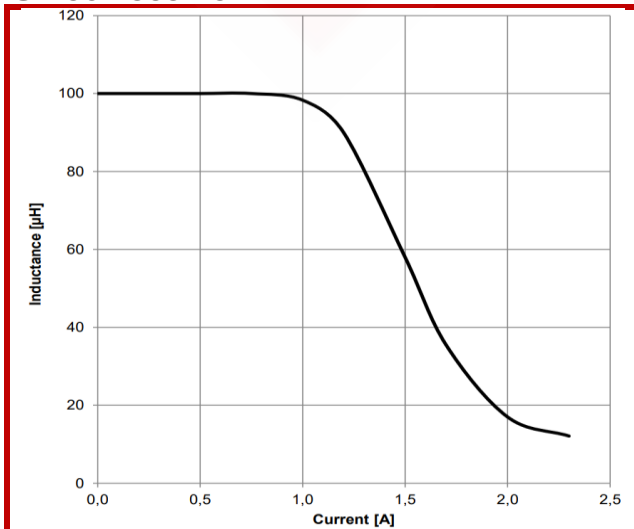
SPI06-1305-470M



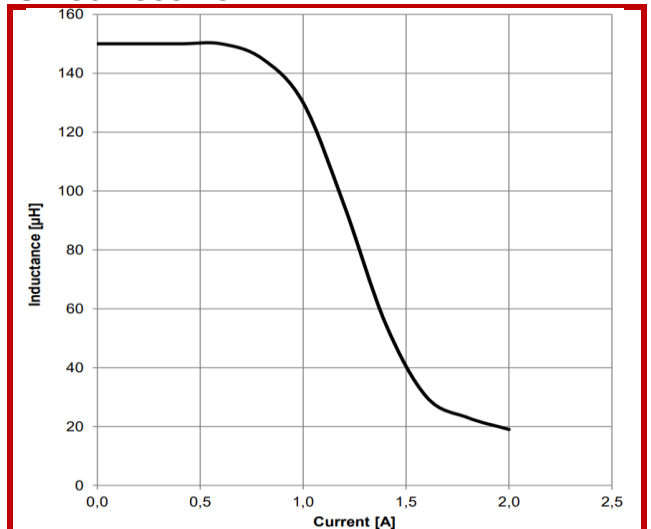
SPI06-1305-680M



SPI06-1305-101M



SPI06-1305-151M

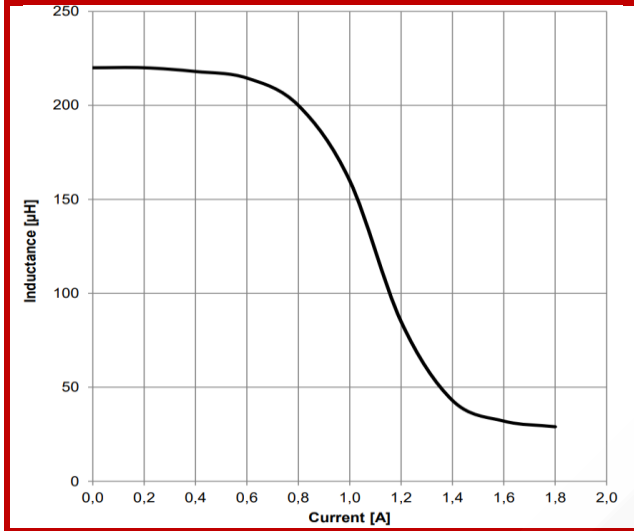




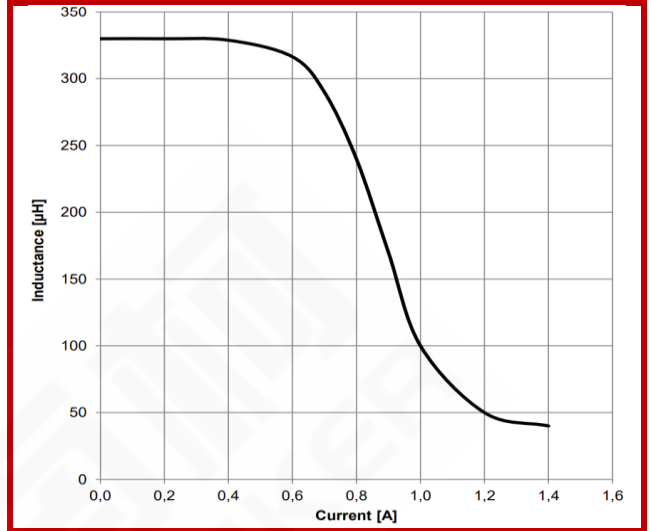
典型电感与电流特性

Typical Inductance vs. Current Characteristics

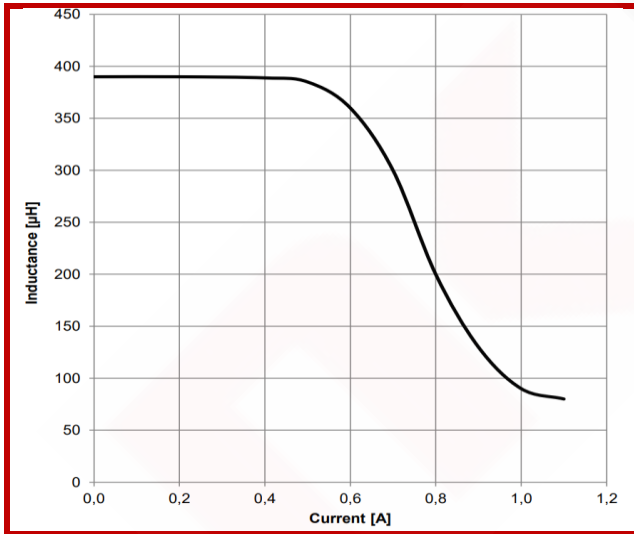
SPI06-1305-221M



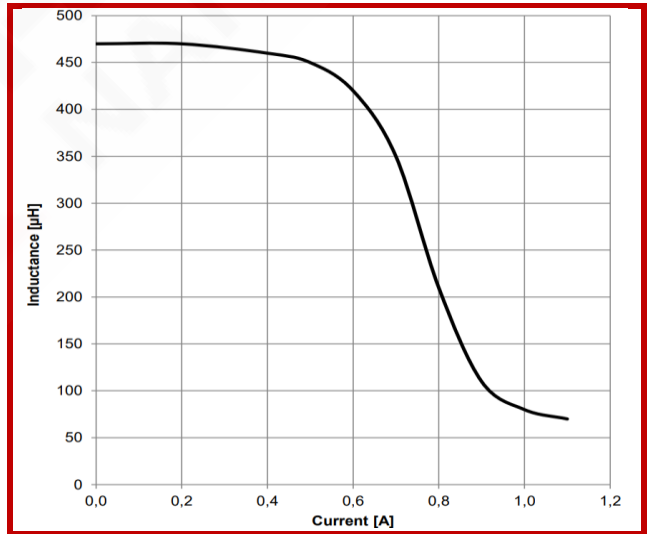
SPI06-1305-331M



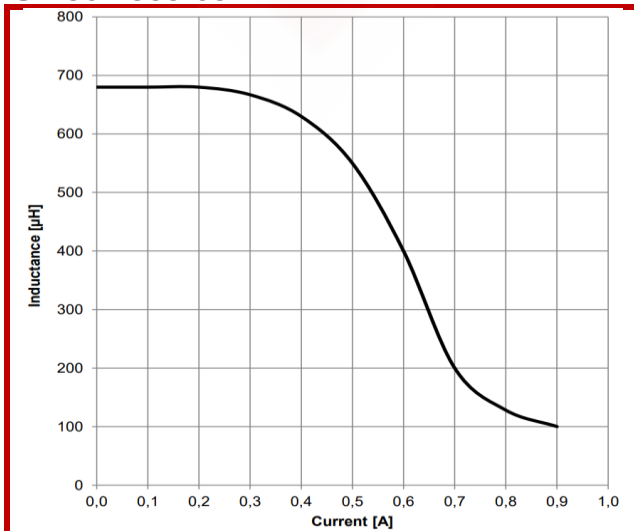
SPI06-1305-391M



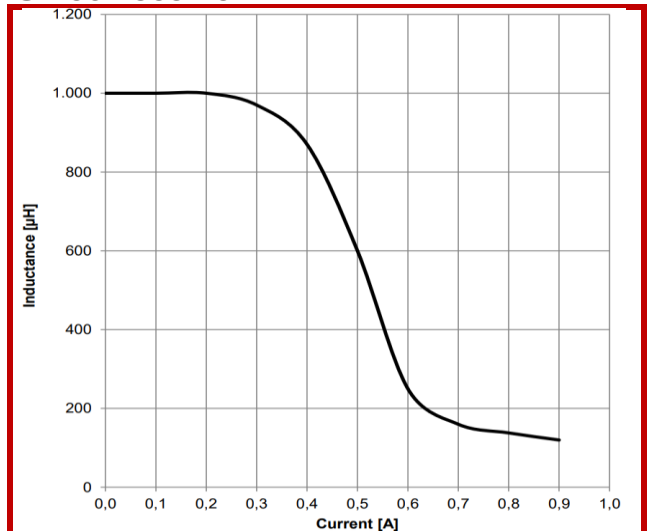
SPI06-1305-471M



SPI06-1305-681M



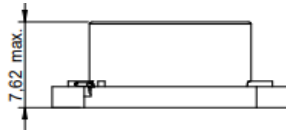
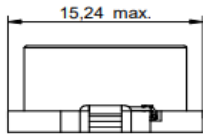
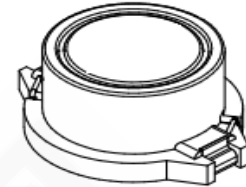
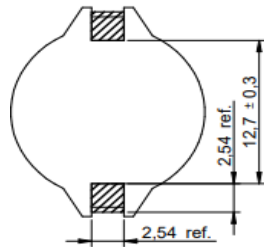
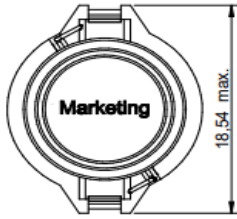
SPI06-1305-102M





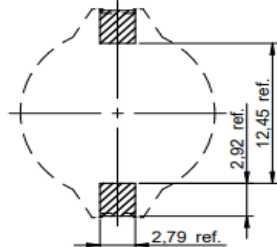
尺寸

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
SPI06-1808-100M	10 ±20%	3.90	0.040	8.00	300
SPI06-1808-150M	15 ±20%	3.50	0.048	7.00	300
SPI06-1808-220M	22 ±20%	3.40	0.059	6.00	300
SPI06-1808-330M	33 ±20%	2.90	0.075	5.00	300
SPI06-1808-470M	47 ±20%	2.80	0.097	4.00	300
SPI06-1808-680M	68 ±20%	2.20	0.138	3.00	300
SPI06-1808-101M	100 ±20%	1.70	0.207	2.40	300
SPI06-1808-151M	150 ±20%	1.30	0.293	2.10	300
SPI06-1808-221M	220 ±20%	1.20	0.470	1.90	300
SPI06-1808-331M	330 ±20%	0.90	0.780	1.10	300
SPI06-1808-471M	470 ±20%	0.80	1.080	1.10	300
SPI06-1808-681M	680 ±20%	0.70	1.400	0.96	300
SPI06-1808-102M	1,000 ±20%	0.60	2.010	0.80	300

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 100 mv

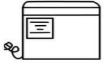
Inductance measure condition at 100 kHz/ 100 mV

☆ 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

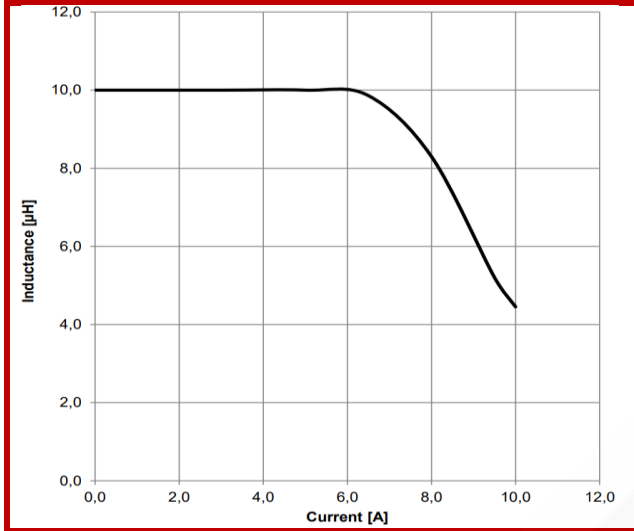
Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



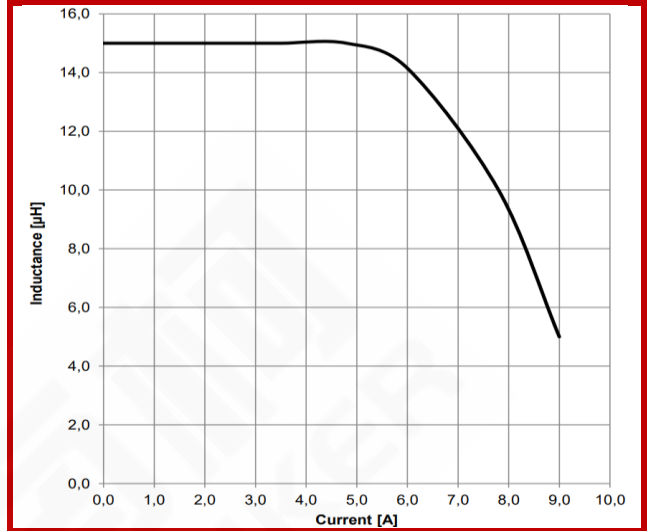
典型电感与电流特性

Typical Inductance vs. Current Characteristics

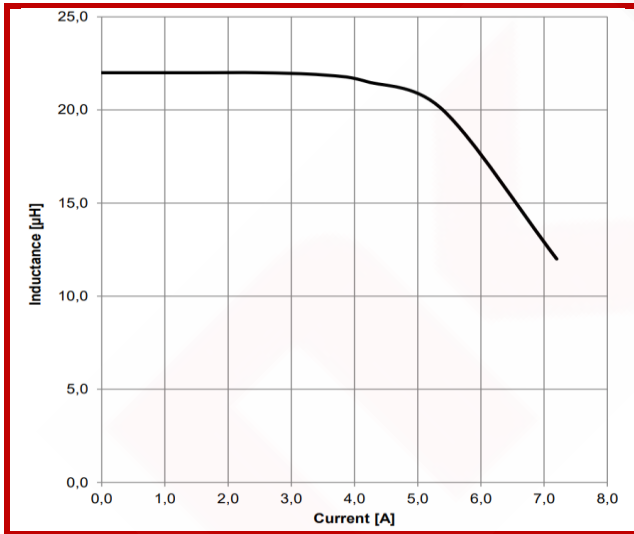
SPI06-1808-100M



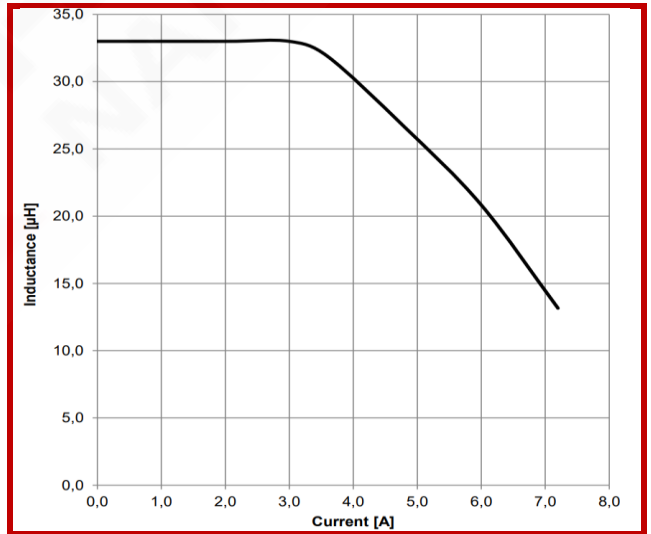
SPI06-1808-150M



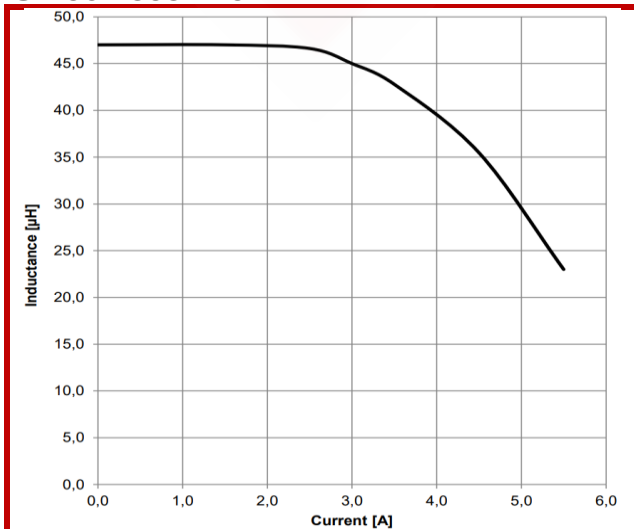
SPI06-1808-220M



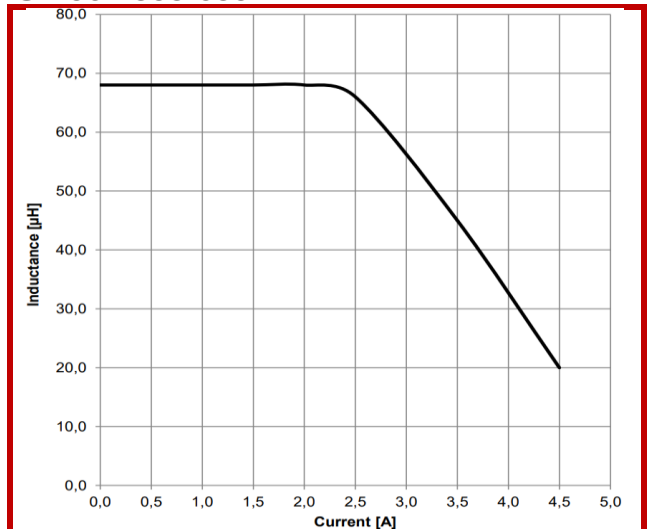
SPI06-1808-330M



SPI06-1808-470M



SPI06-1808-680M

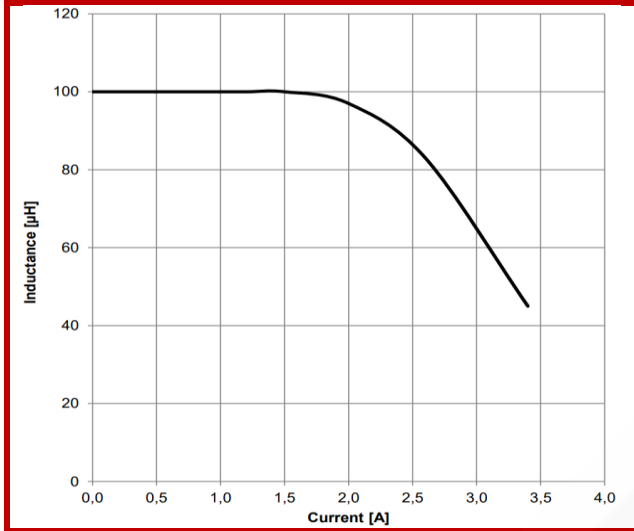




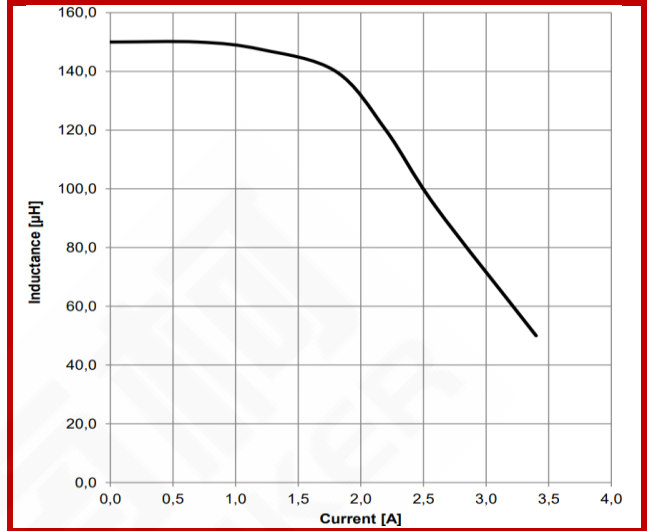
典型电感与电流特性

Typical Inductance vs. Current Characteristics

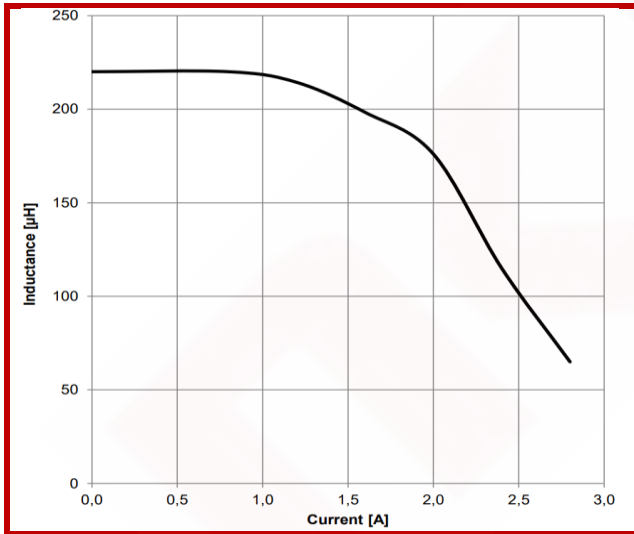
SPI06-1808-101M



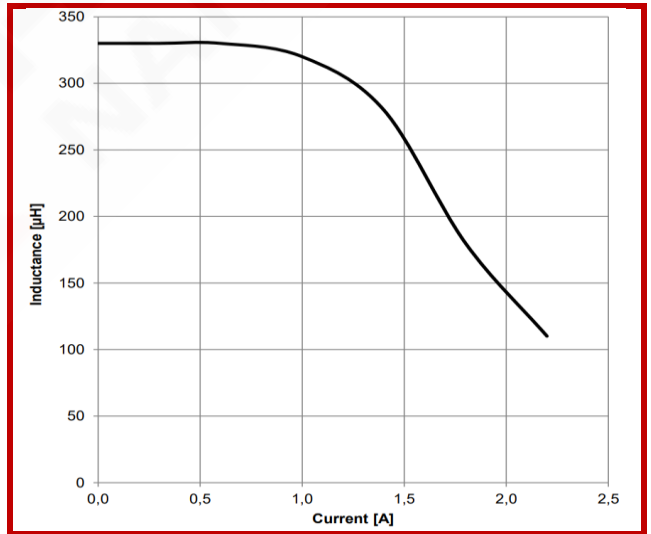
SPI06-1808-151M



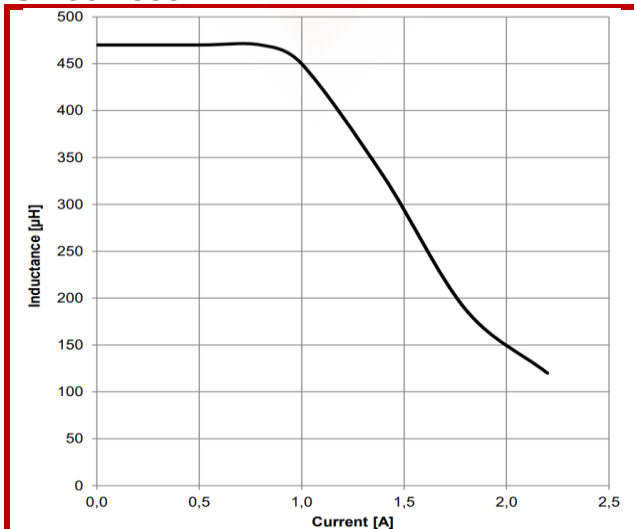
SPI06-1808-221M



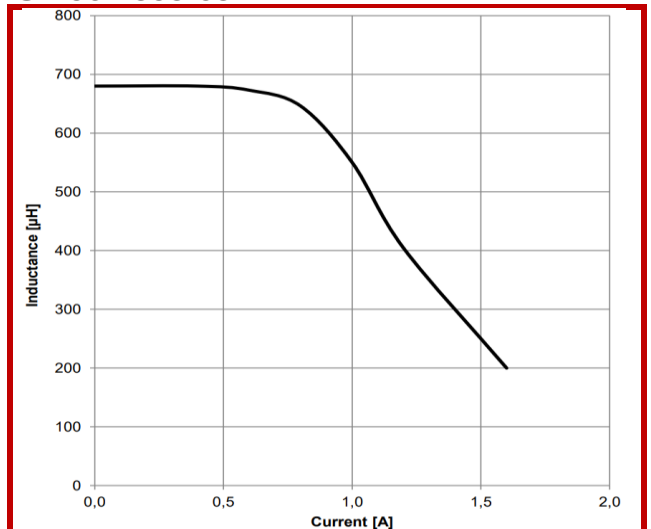
SPI06-1808-331M



SPI06-1808-471M



SPI06-1808-681M

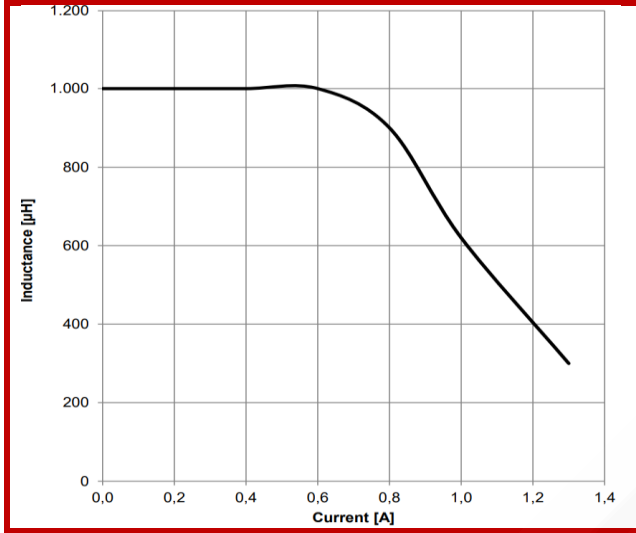




典型电感与电流特性

Typical Inductance vs. Current Characteristics

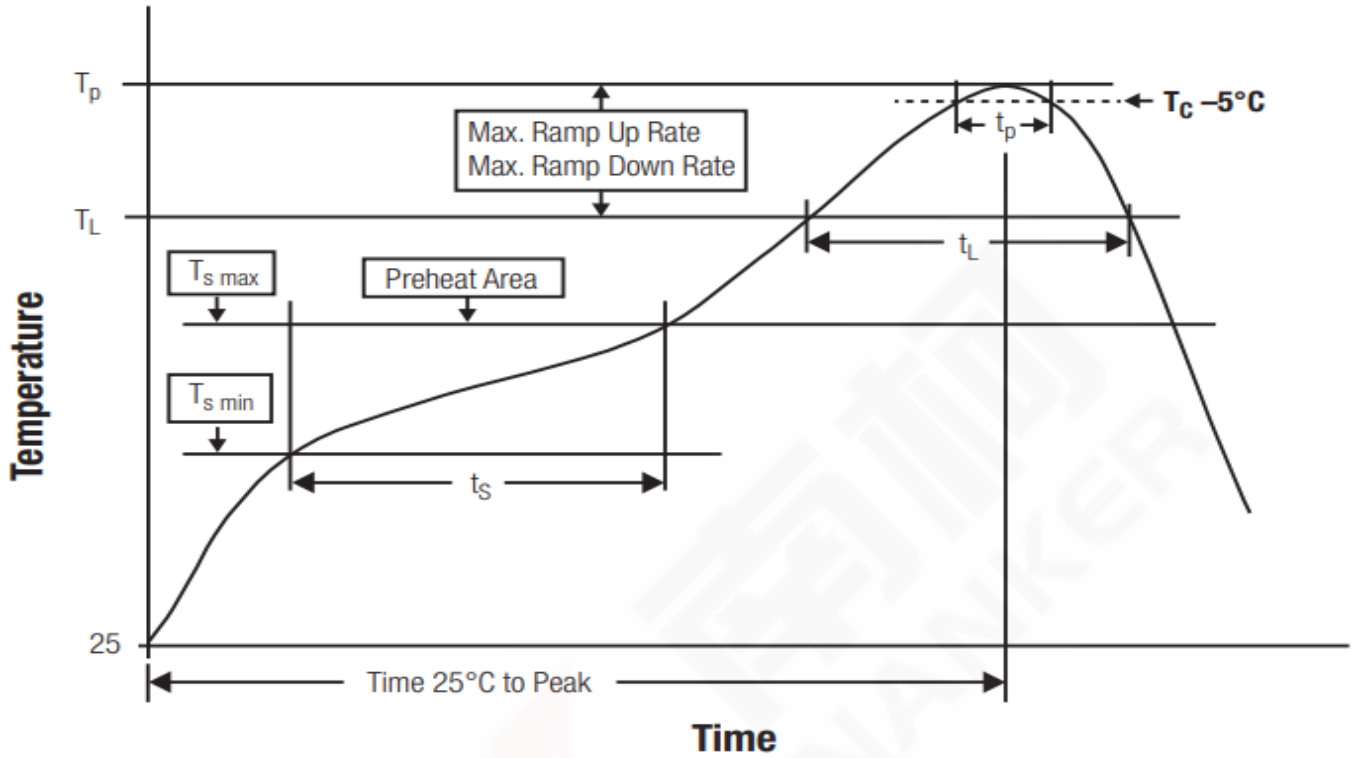
SPI06-1808-102M





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.