

一体耦合电感

Coupled Inductor (Molded)



特性

Characteristics

磁屏蔽

Magnetically shielded

漏感 (Lk) 和额定电流 (Ir) 优于同类元件

Better Leakage Inductance (Lk) and Rated Current (Ir) than comparable components

复合铁芯材料适用于高饱和电流和紧凑空间场合

Composite core material allows high saturation current and compact design

应用

Application

隔离转换器应用 (例如反激转换器)

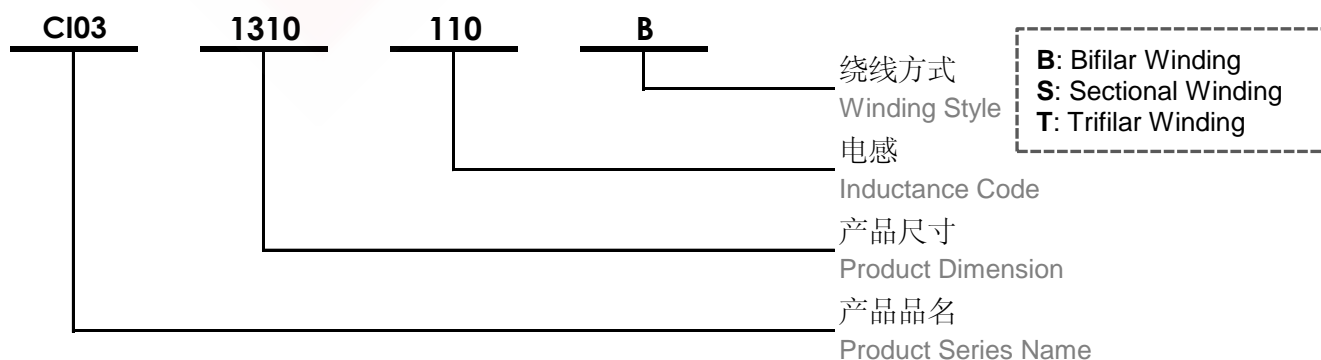
Isolated converter application (e.g. Flyback converter)

升降压电路

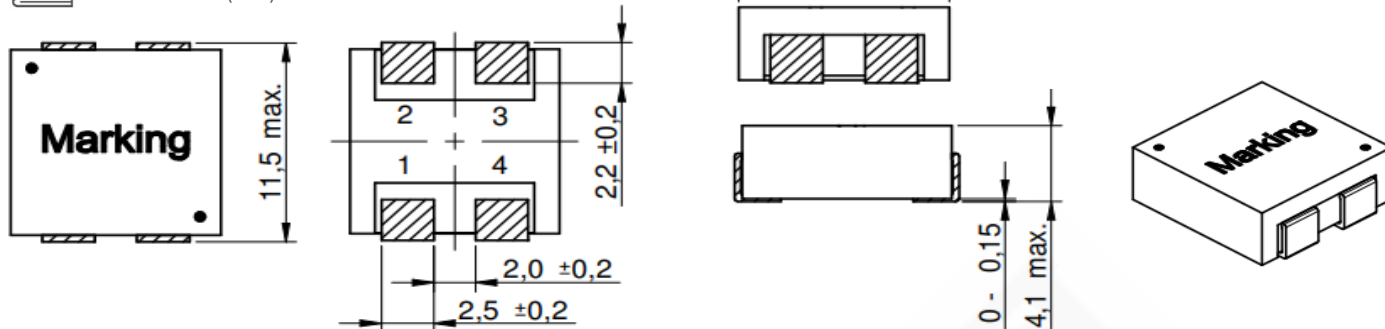
Switching regulator with second, unregulated output voltage

产品品名介绍

Product Number Structure



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

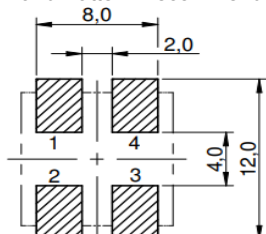


示意图 Schematics



电性特性 Electrical Properties

型号 Part No.	电感 Inductance L1,L2 μH	温升电流 Rated Current I_r max 40°C (A)	直流电阻 DC Resistance DCRmax (m Ω)	饱和电流 Saturation Current I_{sat} typ (A)	绕线方式 Winding Style	额定电压 Rated Voltage V_R
CI03-1004-1R0B	1.00 $\pm 20\%$	12.00	7.50	30.20	Bifilar	60.00
CI03-1004-1R5B	1.50 $\pm 20\%$	11.10	10.00	28.10	Bifilar	60.00
CI03-1004-2R2B	2.20 $\pm 20\%$	8.20	16.50	20.60	Bifilar	60.00
CI03-1004-2R7B	2.70 $\pm 20\%$	7.40	16.80	16.50	Bifilar	60.00
CI03-1004-3R3B	3.30 $\pm 20\%$	6.80	23.50	14.30	Bifilar	60.00
CI03-1004-4R7B	4.70 $\pm 20\%$	6.20	29.00	13.80	Bifilar	60.00
CI03-1004-6R8B	6.80 $\pm 20\%$	5.00	44.00	12.00	Bifilar	60.00
CI03-1004-8R2B	8.20 $\pm 20\%$	4.70	46.00	11.30	Bifilar	60.00
CI03-1004-100B	10.00 $\pm 20\%$	3.70	62.00	9.80	Bifilar	60.00
CI03-1004-150B	15.00 $\pm 20\%$	3.25	95.00	7.80	Bifilar	60.00
CI03-1004-220B	22.00 $\pm 20\%$	2.20	160.00	6.10	Bifilar	60.00
CI03-1004-330B	33.00 $\pm 20\%$	2.05	230.00	5.00	Bifilar	60.00
CI03-1004-470B	47.00 $\pm 20\%$	1.50	340.00	4.40	Bifilar	60.00

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

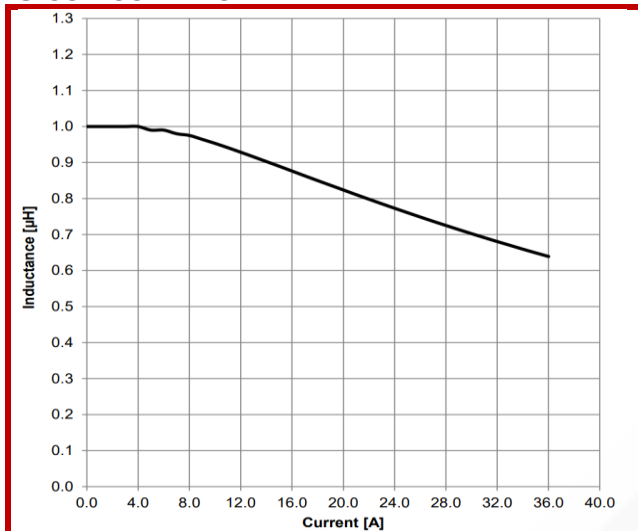
☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



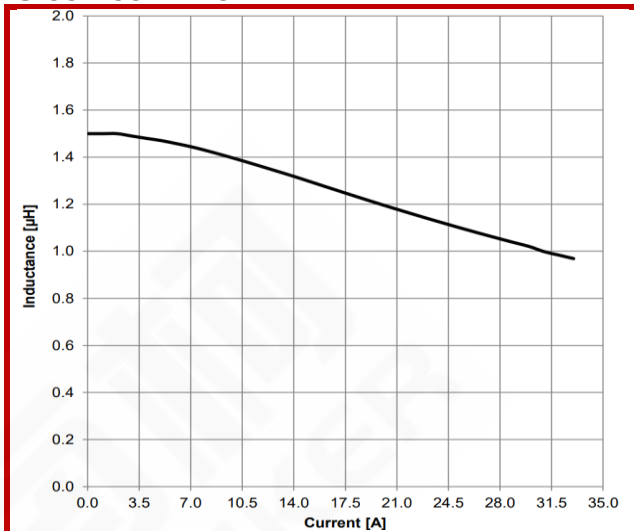
典型电感与电流特性

Typical Inductance vs. Current Characteristics

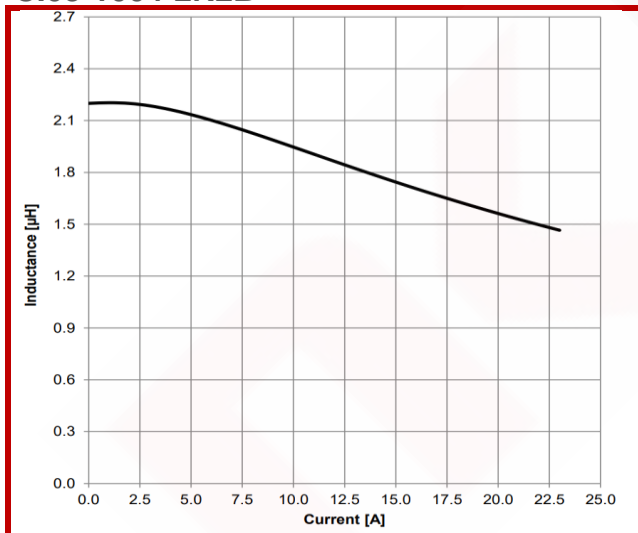
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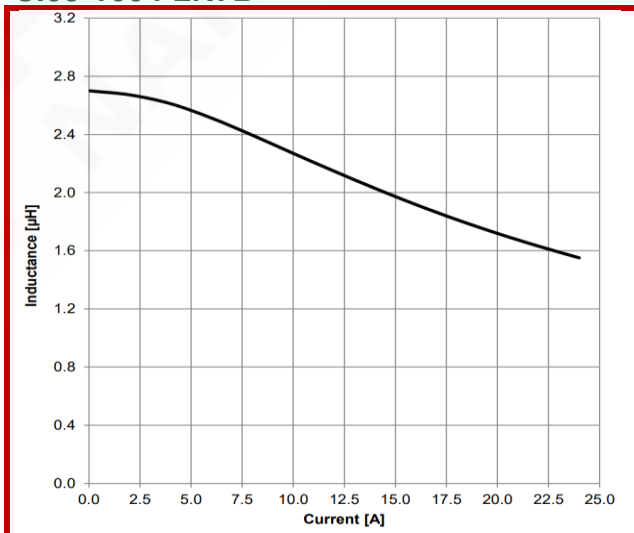
CI03-1004-1R5B



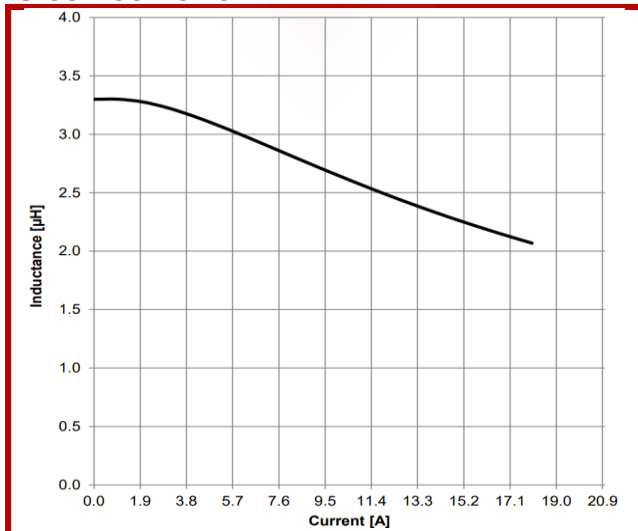
CI03-1004-2R2B



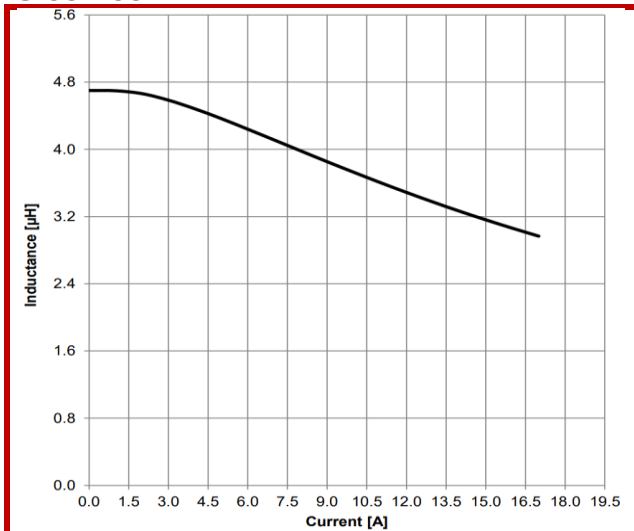
CI03-1004-2R7B



CI03-1004-3R3B



CI03-1004-4R7B

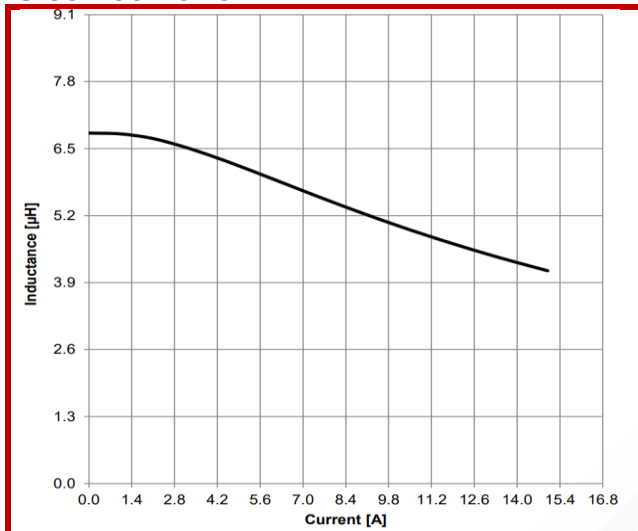




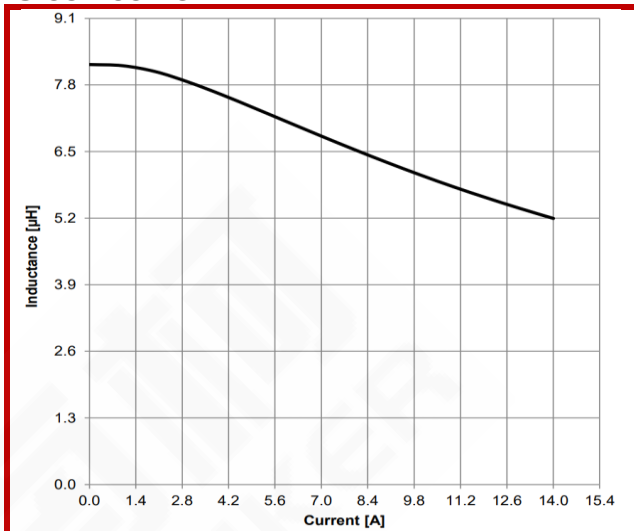
典型电感与电流特性

Typical Inductance vs. Current Characteristics

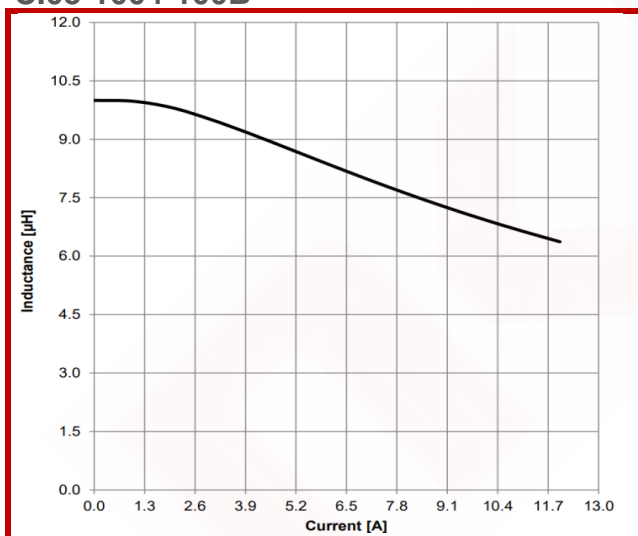
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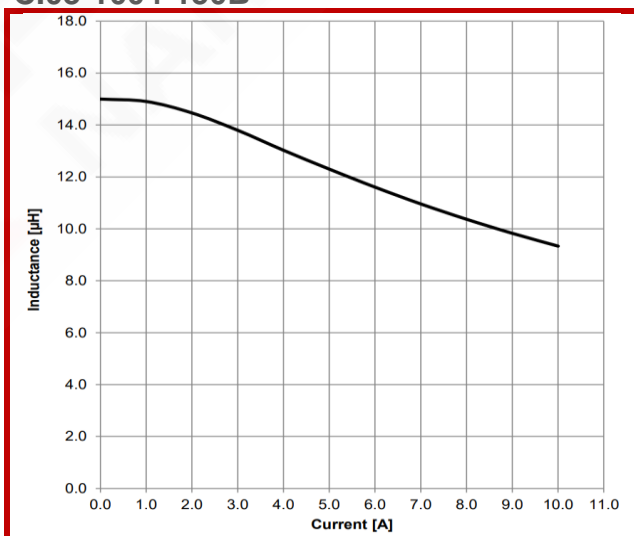
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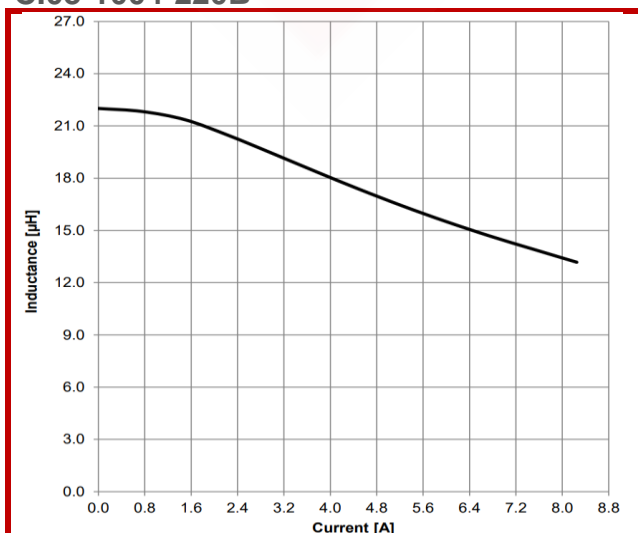
CI03-1004-100B



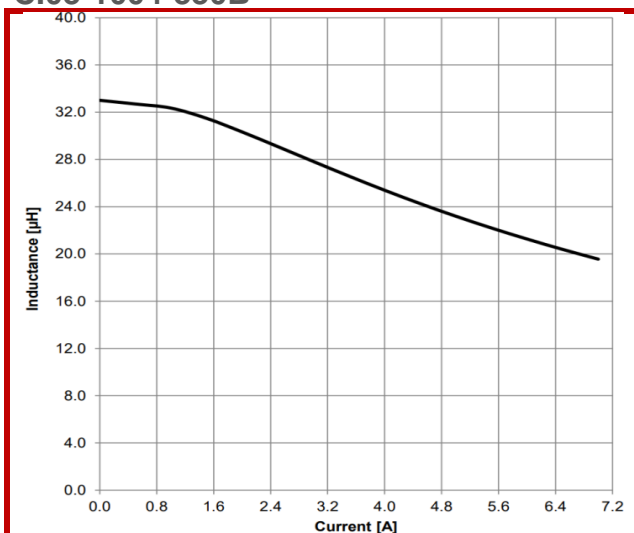
CI03-1004-150B



CI03-1004-220B



CI03-1004-330B

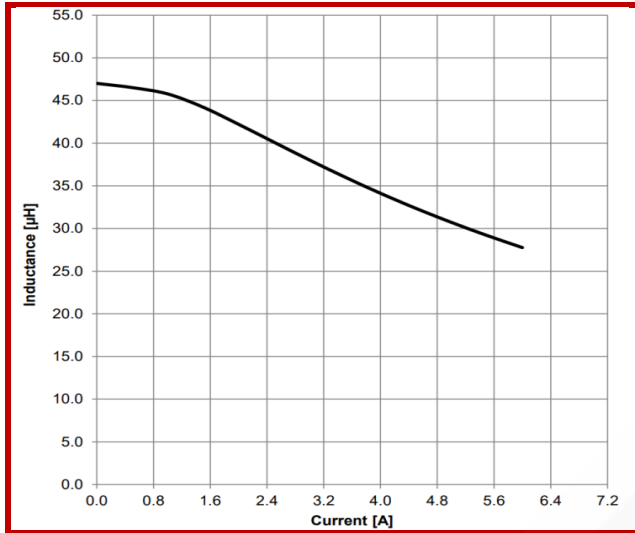




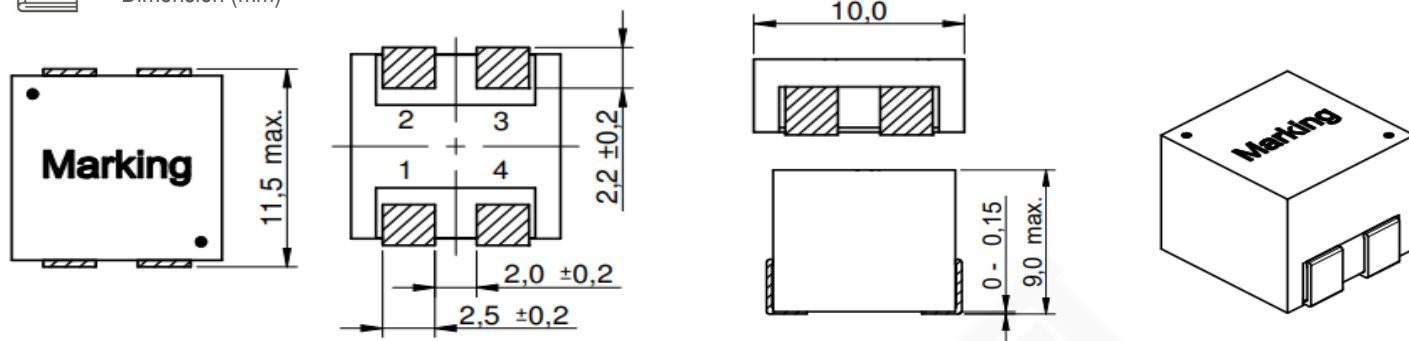
典型电感与电流特性

Typical Inductance vs. Current Characteristics

CI03-1004-470B



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

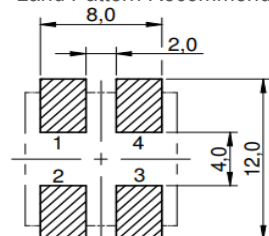


示意图 Schematics



电性特性 Electrical Properties

型号 Part No.	电感 Inductance L1,L2 μH	温升电流 Rated Current I_R max 40°C (A)	直流电阻 DC Resistance DCRmax (m Ω)	饱和电流 Saturation Current I_{sat} typ (A)	绕线方式 Winding Style	额定电压 Rated Voltage V_R
CI03-1009-1R0B	1.00 $\pm 20\%$	17.00	5.60	43.50	Bifilar	60.00
CI03-1009-1R5B	1.50 $\pm 20\%$	12.50	9.40	34.00	Bifilar	60.00
CI03-1009-2R2B	2.20 $\pm 20\%$	11.50	12.50	29.50	Bifilar	60.00
CI03-1009-3R3B	3.30 $\pm 20\%$	7.50	26.00	28.20	Bifilar	60.00
CI03-1009-4R7B	4.70 $\pm 20\%$	5.90	40.00	24.20	Bifilar	60.00
CI03-1009-6R8B	6.80 $\pm 20\%$	5.00	51.50	21.20	Bifilar	60.00
CI03-1009-8R2B	8.20 $\pm 20\%$	4.80	63.00	18.50	Bifilar	60.00
CI03-1009-100B	10.00 $\pm 20\%$	4.50	69.00	17.00	Bifilar	60.00
CI03-1009-150B	15.00 $\pm 20\%$	3.90	87.00	9.50	Bifilar	60.00
CI03-1009-220B	22.00 $\pm 20\%$	3.40	106.00	8.10	Bifilar	60.00
CI03-1009-330B	33.00 $\pm 20\%$	2.90	145.00	6.80	Bifilar	60.00
CI03-1009-470B	47.00 $\pm 20\%$	2.30	240.00	6.00	Bifilar	60.00

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

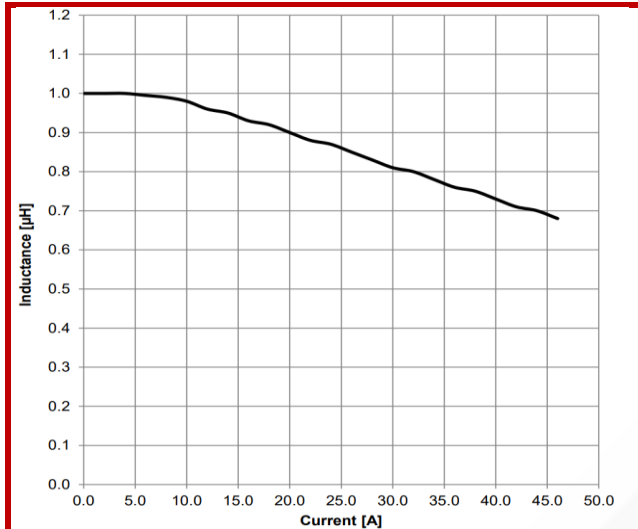
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



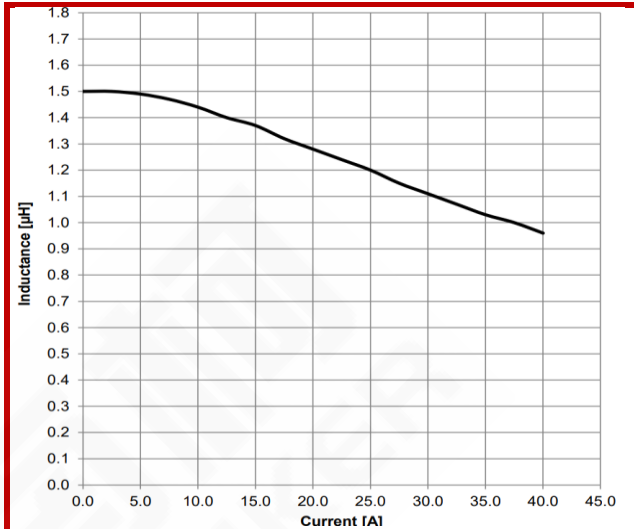
典型电感与电流特性

Typical Inductance vs. Current Characteristics

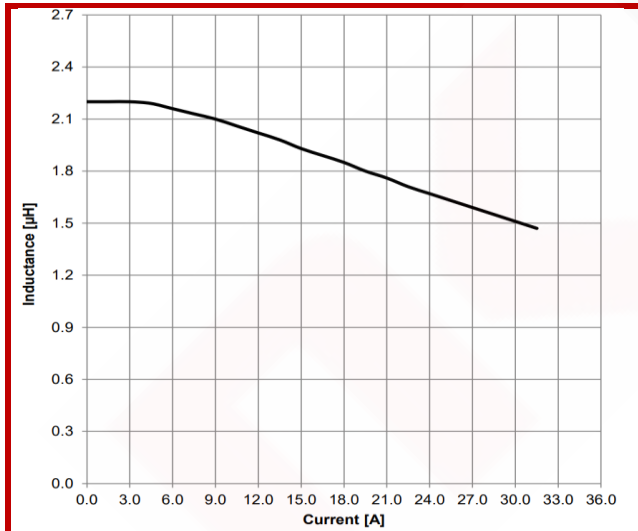
CI03-1009-1R0B



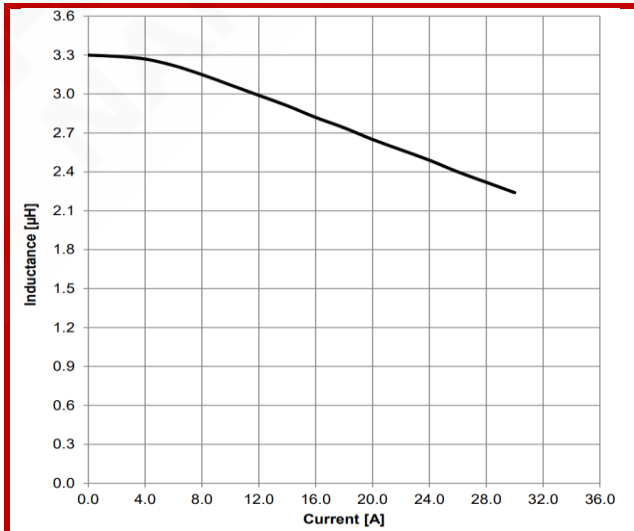
CI03-1009-1R5B



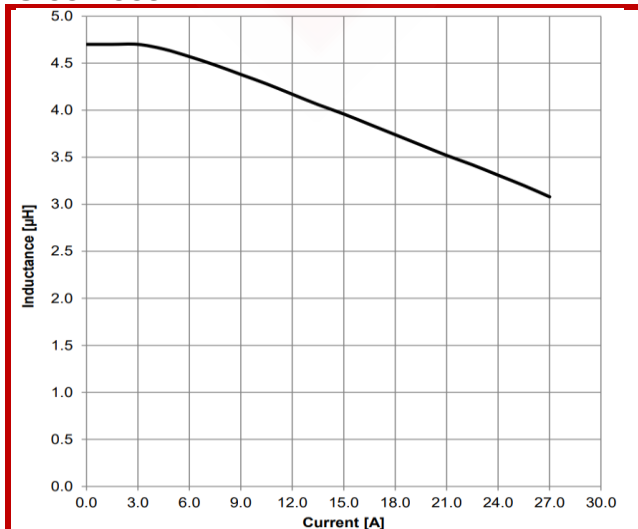
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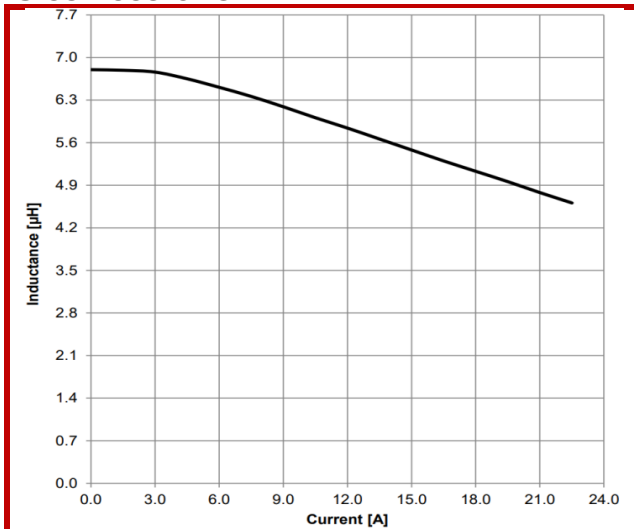
CI03-1009-3R3B



CI03-1009-4R7B



CI03-1009-6R8B

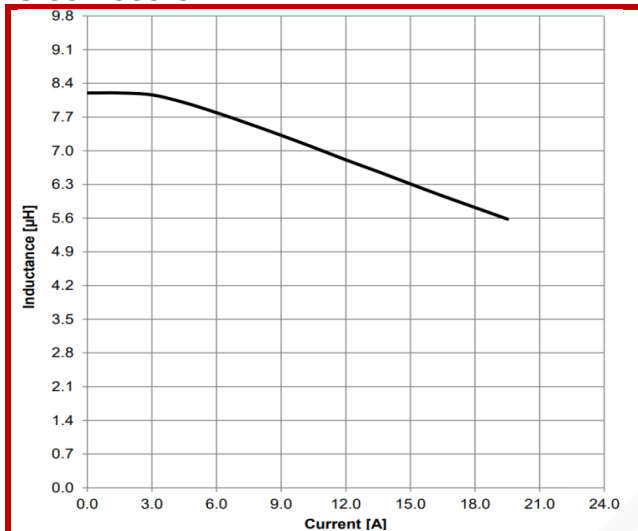




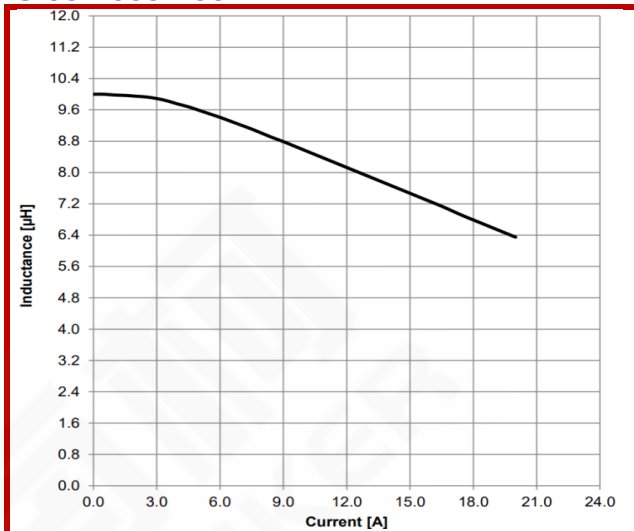
典型电感与电流特性

Typical Inductance vs. Current Characteristics

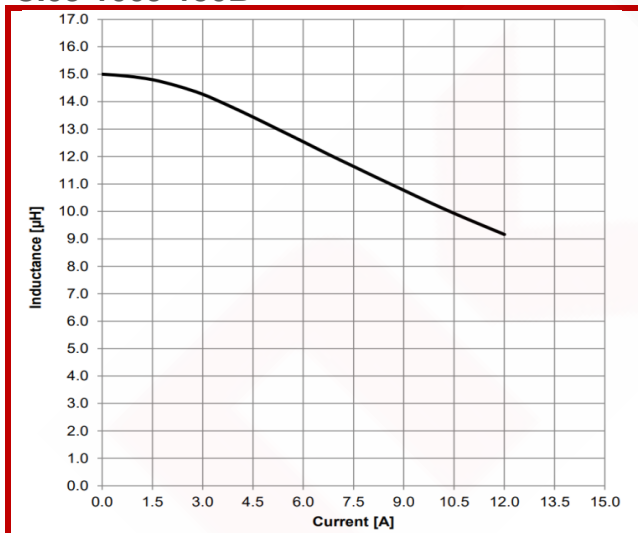
CI03-1009-8R2B



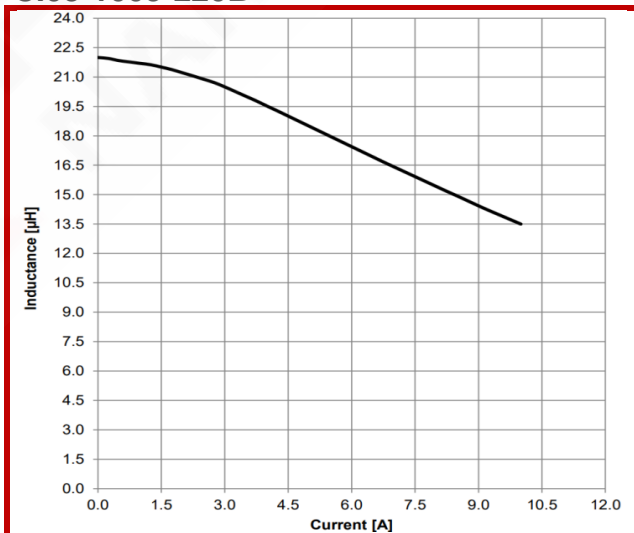
CI03-1009-100B



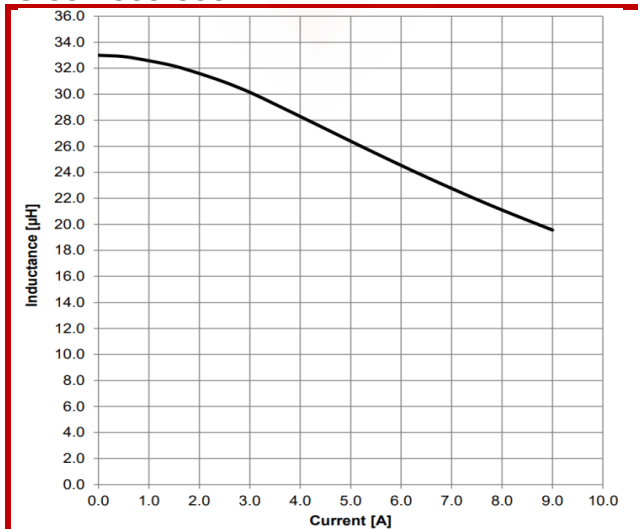
CI03-1009-150B



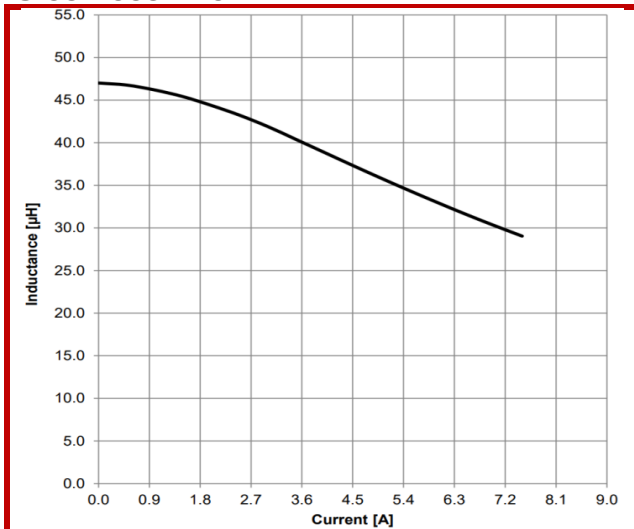
CI03-1009-220B



CI03-1009-330B



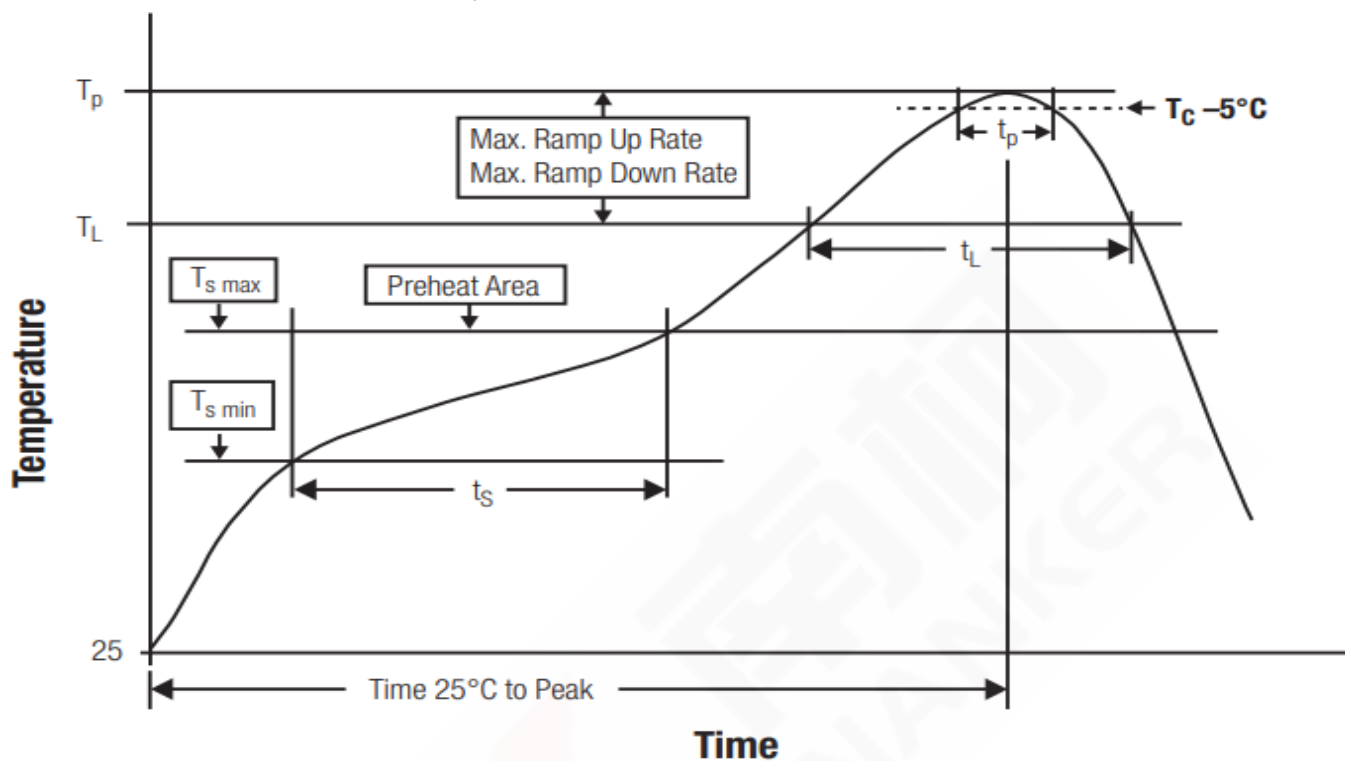
CI03-1009-470B





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.