

扁线耦合电感

Coupled Inductor (Flat Wire)



特性

Characteristics

超低的DCR

Very low DCR

感值低温漂

Low inductance drift over temperature

两个相同绕组的耦合电感器

Coupled inductor with two identical windings

应用

Application

大功率开关稳压器

High power switching regulators

1:1反激变换器

1:1 flyback converter

升降压电路

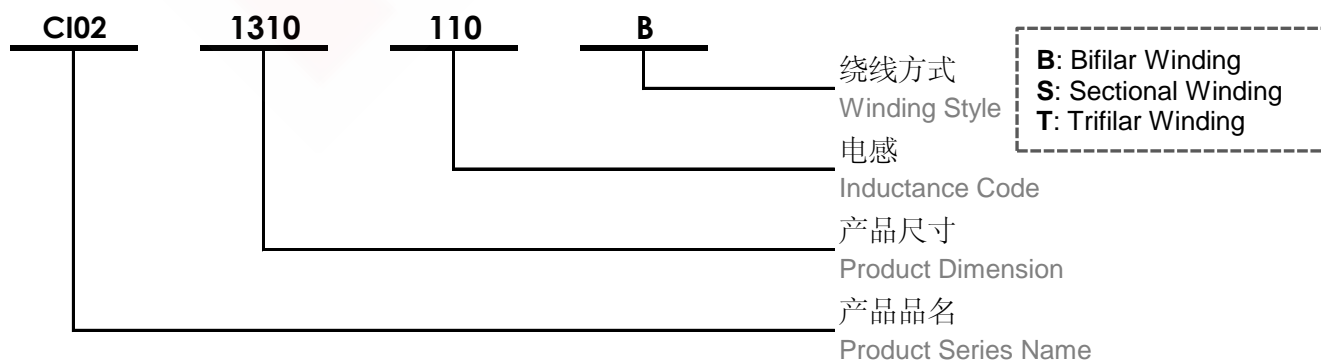
Switching regulators with second unregulated output voltage

电池充电平衡器

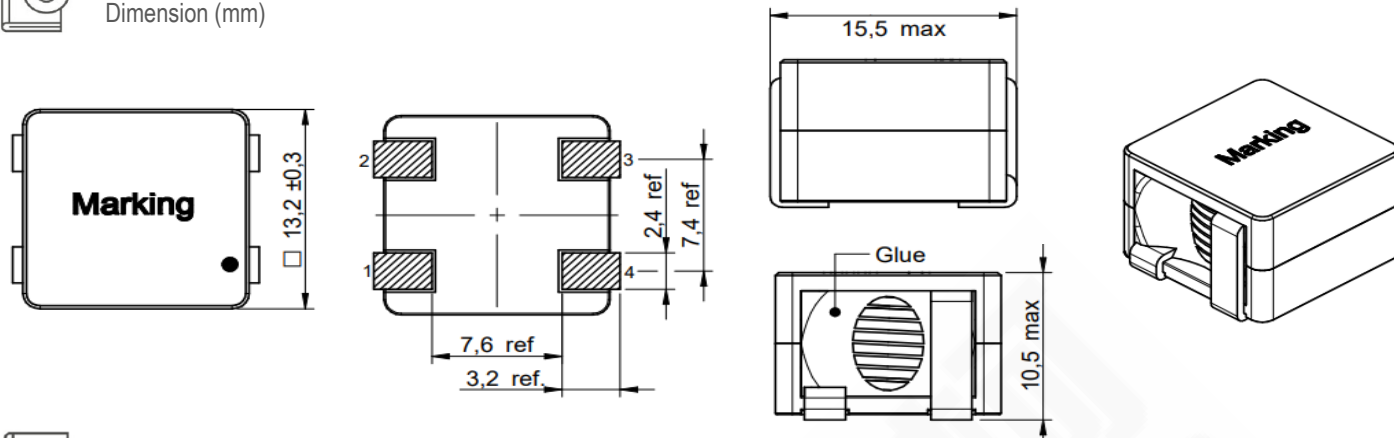
Battery Cell Charging Balancer

产品品名介绍

Product Number Structure



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

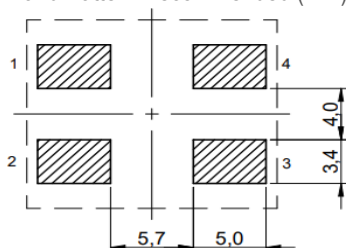


示意图 Schematics



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 50°C (A)	直流电阻 DC Resistance DCR $\pm 10\%$ (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
CI02-1310-R80S	0.80 $\pm 20\%$	28.00	1.60	62.00	Sectional	80.00
CI02-1310-1R2S	1.20 $\pm 20\%$	23.00	2.40	47.00	Sectional	80.00
CI02-1310-1R7S	1.70 $\pm 20\%$	21.00	3.30	39.00	Sectional	80.00
CI02-1310-2R2S	2.20 $\pm 20\%$	18.00	4.20	35.00	Sectional	80.00
CI02-1310-2R9S	2.90 $\pm 20\%$	17.00	5.60	29.00	Sectional	80.00
CI02-1310-3R5S	3.50 $\pm 20\%$	14.00	7.50	27.00	Sectional	80.00
CI02-1310-4R4S	4.40 $\pm 20\%$	12.00	9.60	24.00	Sectional	80.00

测试状态

Test Condition

☆ 电感测试条件为 100 kHz/ 1.0 mA

Inductance measure condition at 100 kHz/ 1.0 mA

☆ 工作温度: -40°C ~ +150°C

Operating Temperature: -40°C ~ +150°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

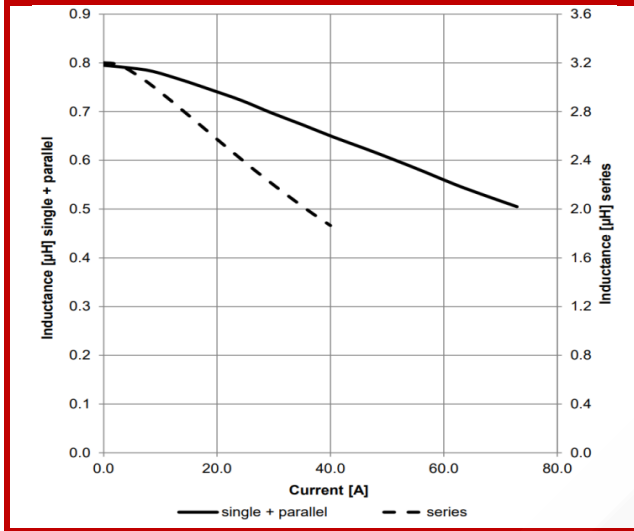
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



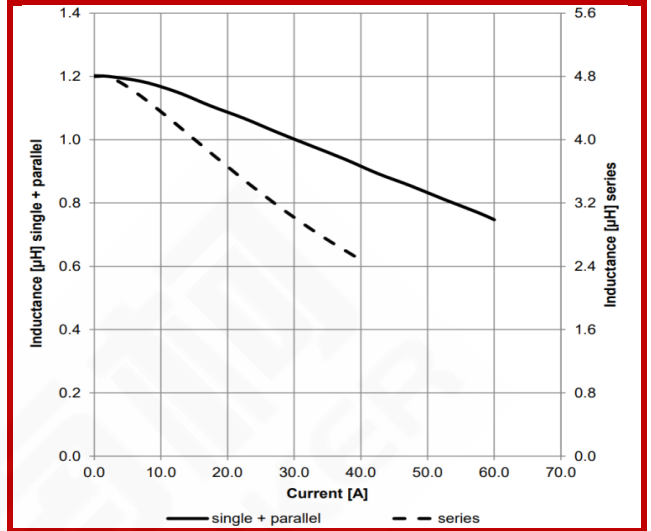
典型电感与电流特性

Typical Inductance vs. Current Characteristics

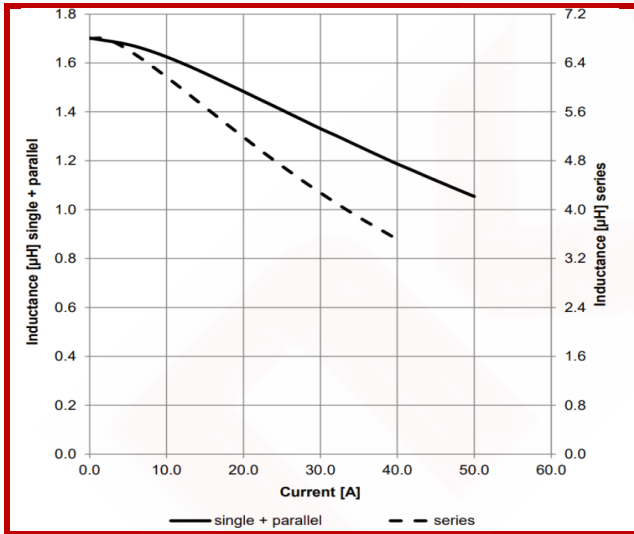
CI02-1310-R80S



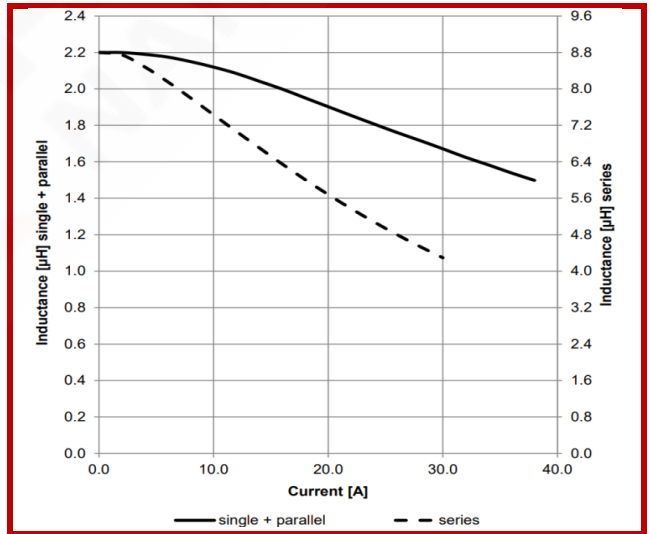
CI02-1310-1R2S



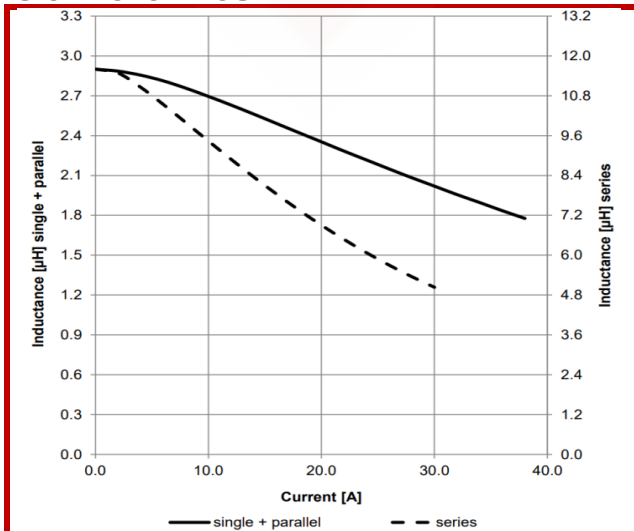
CI02-1310-1R7S



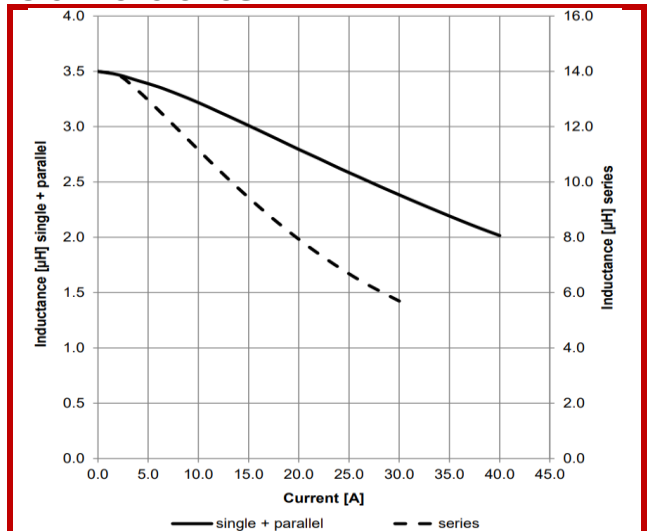
CI02-1310-2R2S



CI02-1310-2R9S



CI02-1310-3R5S

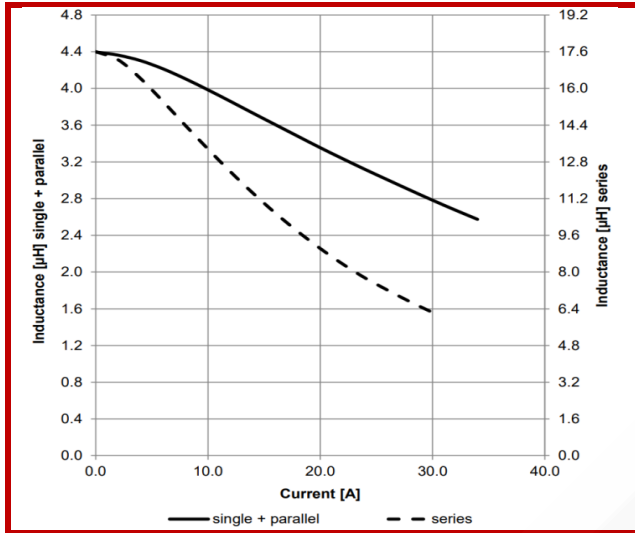




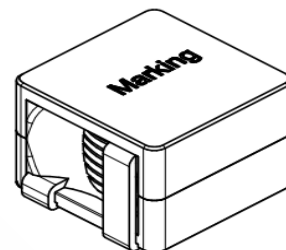
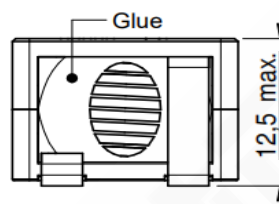
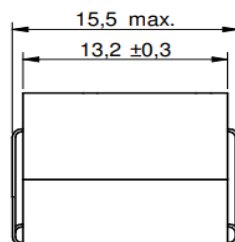
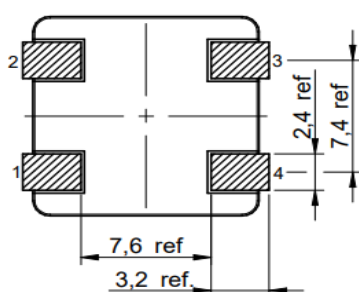
典型电感与电流特性

Typical Inductance vs. Current Characteristics

CI02-1310-4R4S



尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

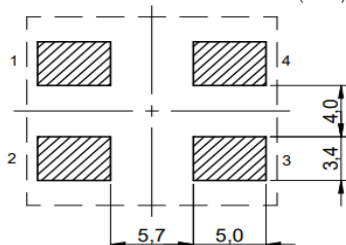


示意图 Schematics



电性特性 Electrical Properties

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CI02-1312-6R8S	6.80 $\pm 20\%$	14.00	11.30	16.00	Sectional	80.00
CI02-1312-8R2S	8.20 $\pm 20\%$	13.50	13.00	14.00	Sectional	80.00
CI02-1312-100S	10.00 $\pm 20\%$	13.00	13.90	13.50	Sectional	80.00

测试状态

Test Condition

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Inductance measure condition at 100 kHz/ 1.0 mA

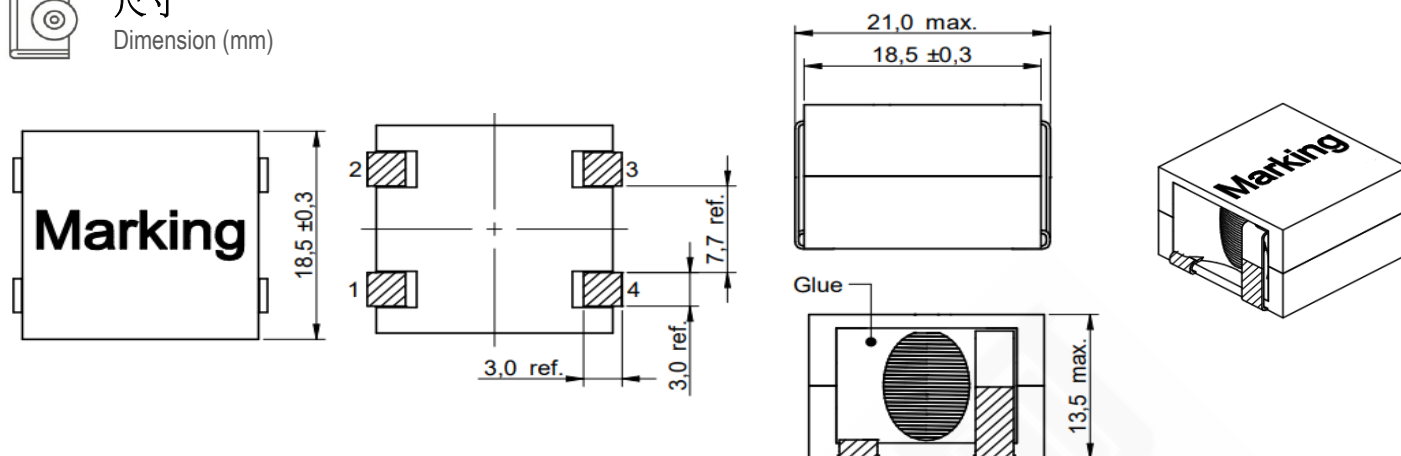
☆ 工作温度: -40°C ~ +150°C

Operating Temperature: -40°C ~ +150°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

尺寸 Dimension (mm)



焊盘推荐 Land Pattern Recommended (mm)

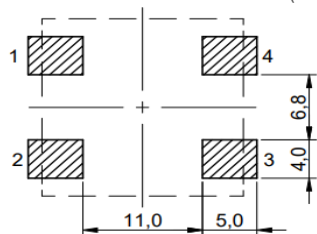


示意图 Schematics



电性特性 Electrical Properties

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CI02-1813-6R8S	6.80 $\pm 20\%$	13.50	6.10	26.00	Sectional	80.00
CI02-1813-8R2S	8.20 $\pm 20\%$	13.00	8.40	24.00	Sectional	80.00
CI02-1813-100S	10.00 $\pm 20\%$	11.50	11.00	22.00	Sectional	80.00

测试状态

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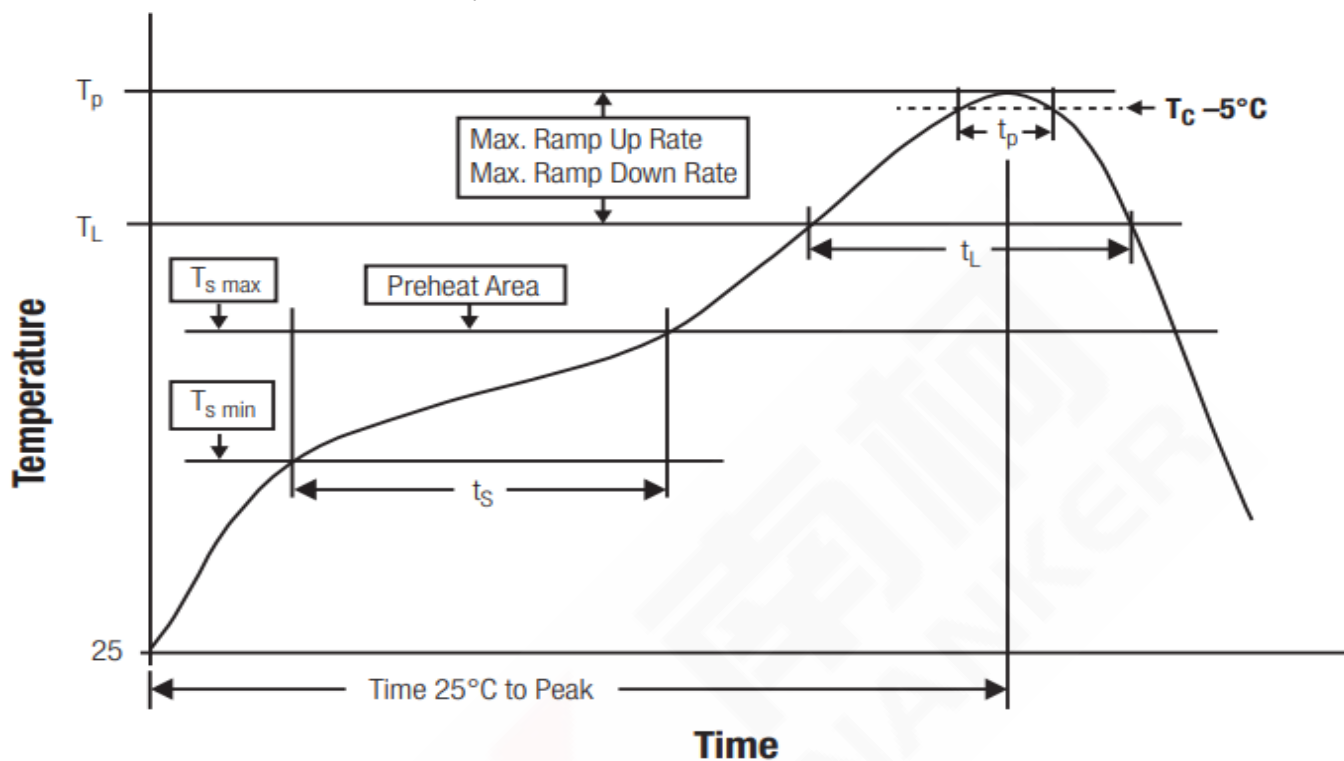
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Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



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.