

HIGH CURRENT POWER INDUCTOR

大电流功率电感

■ PR15XX

Features 特点

- Susing flat wire, and SMD type. 采用扁平线，贴片类型
- Low radiation noise by magnetically shielded construction
闭合磁路封装，低辐射
- High current, Low resistance. 大电流，低电阻
- Operating temperature : -40°C ~ +125°C. 工作温度：-40°C ~ +125°C
- Tape and reel packaging: -40°C to +80°C 卷带包装：-40°C 至 +80°C
- Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
耐焊接热 最多三个 40 秒回流 +260°C，部件在循环之间冷却至室温
- Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
湿气敏感度等级 (MSL) 1 (在 <30°C / 85% 相对湿度时的无限制)



Applications

- high efficiency DC/DC converters. 高效 DC/DC 转换器
- Single and polyphase buck converters. 单相、多相降压转换器
- Filter for audio applications. 音频滤波应用
- Optimized for high current boost applications. 大电流升压应用优化

Electrical characteristics

Part number 料号	Inductance 电感量 $\mu\text{H} \pm 20\%$	DCR 直流电阻 $\text{m}\Omega$		SRF 自谐振频率 MHz	Isat 饱和电流 A typical			Irms 温升电流 A typical	
		Typ	Max		typical	10% drop	20% drop	30% drop	20°C rise
PR1508-301KL	0.3	0.48	0.55	140	43.2	49.6	53	38	42
PR1508-501KL	0.5	0.48	0.55	83	25.8	29.6	31.4	38	42
PR1508-681KL	0.68	0.48	0.55	63	18.8	21.6	23.2	38	42
PR1508-102KL	1.0	0.48	0.55	48	12.1	14.2	16.1	38	42
PR1510-152KL	1.5	0.9	0.99	53	16.8	19.4	20.3	33	39
PR1510-202KL	2.0	0.9	0.99	45	12.1	13.9	15	33	39
PR1512-301KL	0.3	1.3	1.43	154	87.0	92.8	106	30	37
PR1512-501KL	0.5	1.3	1.43	122	56.1	59.5	62.5	30	37
PR1512-681KL	0.68	1.3	1.43	100	41.2	43.5	45.8	30	37
PR1512-102KL	1.0	1.3	1.43	78	28.9	31.0	32.2	30	37
PR1512-152KL	1.5	1.3	1.43	62	21.8	23.6	24.6	30	37
PR1512-202KL	2.0	1.3	1.43	50	16.9	18.5	19.4	30	37
PR1512-362KL	3.6	1.3	1.43	35	9.6	11.2	12.1	30	37

Remark

- ① Inductance is measured with a LCR meter Agilent 4284A or equivalent.
Test frequency at 100kHz
- ② DC resistance is measured with Keithley 580 Milliohm Meter, or equivalent.
Reference ambient temperature 25°C
- ③ SRF measured using an Agilent 4395A network analyzer and an Agilent 16193A test fixture.
- ④ DC current at 25°C that causes the specified inductance drop from its value without current.
- ⑤ Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
- ⑥ Electrical specifications at 25°C

备注

- ① 电感量测试采用 Agilent 4284A 数字电桥或同等仪器；
测试频率 100KHz
- ② 直流电阻测试采用 Keithley 580 毫欧表或同等仪器；
环境温度 25°C
- ③ SRF 使用 Agilent 4395A 网络分析仪和 Agilent 16193A 测试夹具测量。
- ④ 直流电流在 25°C，加载导致指定电感从没有电流的值下降。
- ⑤ 导致指定温度从 25°C 环境温度上升的电流。此信息仅供参考，不代表绝对最大额定值。
- ⑥ 25°C 时的电气规格。

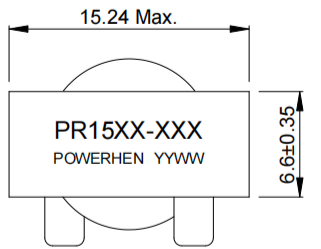
ShenZhen Powerhen Electronic Co.,Ltd

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Tel: 0755-23570708

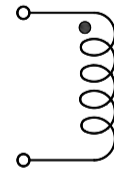
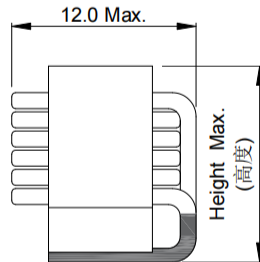
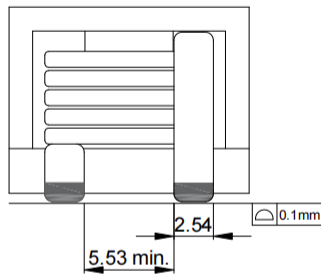
E-Mail: sales@powerhen.com

Dimensions 结构尺寸

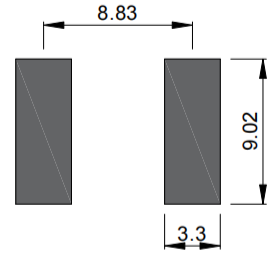


Height(高度):

PR1508 series 8.26mm
PR1510 series 10.56mm
PR1512 series 12.66mm

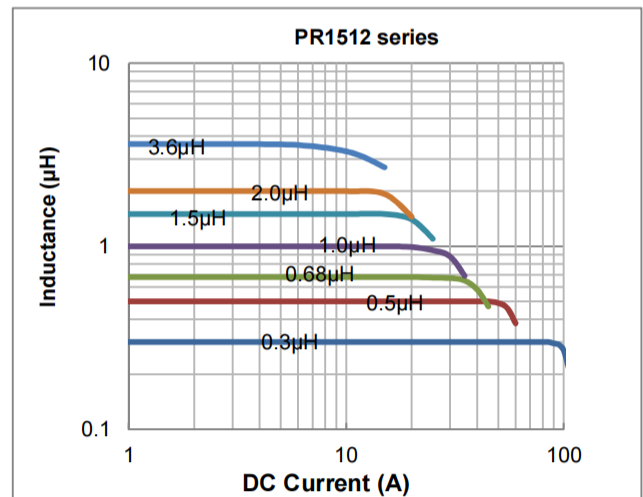
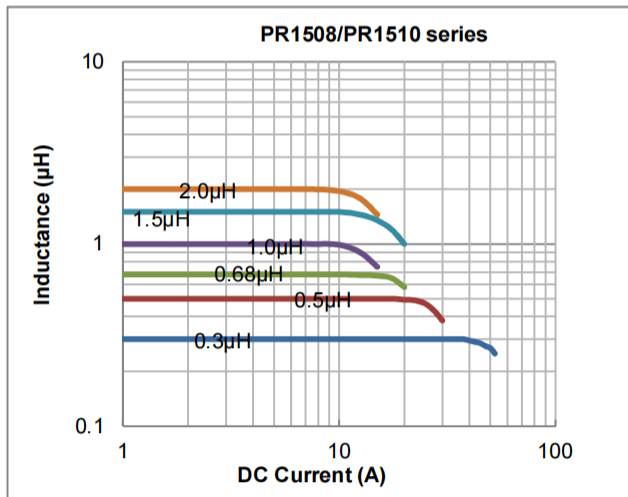


SCHEMATIC



PCB LAYOUT

Electrical Characteristic Curve



■ Packaging Specification - Tape and Reel: [mm]

包装规格 - 卷带包装: [mm]

