

SMD HIGH CURRENT POWER INDUCTOR

贴片大电流功率电感

■ PR19XX Series

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 ①	DCR (mΩ)②		SRF ③	Isat ④			Irms ⑤	
	电感量	直流电阻		自谐振频率	直流饱和电流			温升电流	
	μH ±10%	typ	max	(MHz)	A typical			A typiacl	
				reference	drop10%	drop20%	drop30%	rise20℃	rise40℃
PR1908-102KL	1.0	0.95	1.05	48	46.6	48.3	49.1	25.2	36.3
PR1909-152KL	1.5	1.35	1.5	46	48.1	49.2	50.2	23.4	30.2
PR1910-222KL	2.2	1.8	2.0	41	43.6	45.7	46.3	19.1	27.2
PR1911-332KL	3.3	2.25	2.5	31	35.1	36.4	37.1	17.2	25.1
PR1911-472KL	4.7	2.25	2.5	26	25.5	26.6	27.3	17.2	25.1
PR1908-682KL	6.8	7.60	8.35	18	23.9	25.3	26.4	10.1	12.7
PR1908-103KL	10	8.80	9.68	15	19.1	20.2	20.8	8.8	11.7
PR1909-153KL	15	11.0	12.1	13	15.8	16.4	16.9	7.6	10.7
PR1910-203KL	20	13.5	14.85	11	13.4	14.5	14.9	6.4	9.5
PR1911-303KL	30	17.0	18.7	10	11.2	12.5	12.9	5.7	8.6

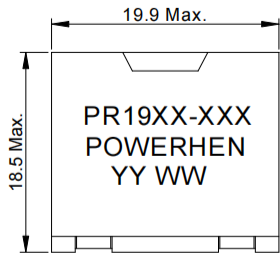
Remark

- ① Inductance is measured with a LCR meter Agilent 4284A or equivalent. Test frequency at 100kHz 1V
- 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 16093A 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

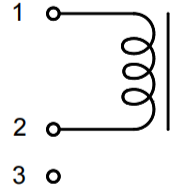
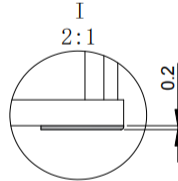
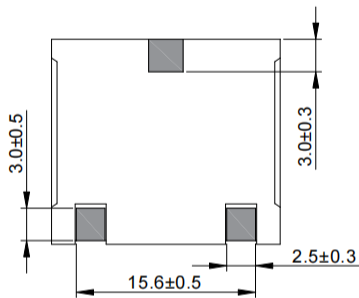
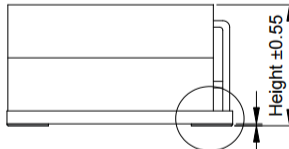
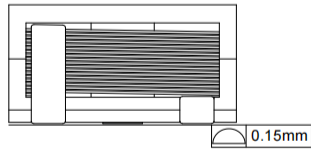
- ① 电感量测试采用 Agilent 4284A 数字电桥或同等仪器; 测试频率 100kHz 1V
- ② 直流电阻测试采用 Keithley 580 毫欧表或同等仪器; 环境温度 25°C
- ③ SRF 使用 Agilent 4395A 网络分析仪和 Agilent 16093A 测试夹具测量。
- ④ 直流电流在 25°C, 加载导致指定电感从没有电流的值下降。
- ⑤ 导致指定温度从 25°C 环境温度上升的电流。此信息仅供参考, 不代表绝对最大额定值。
- ⑥ 25°C 时的电气规格

Dimension 结构尺寸

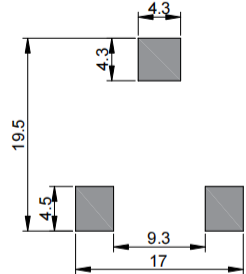


Height:

PR1908	7.65mm
PR1909	8.65mm
PR1910	9.25mm
PR1911	10.25mm

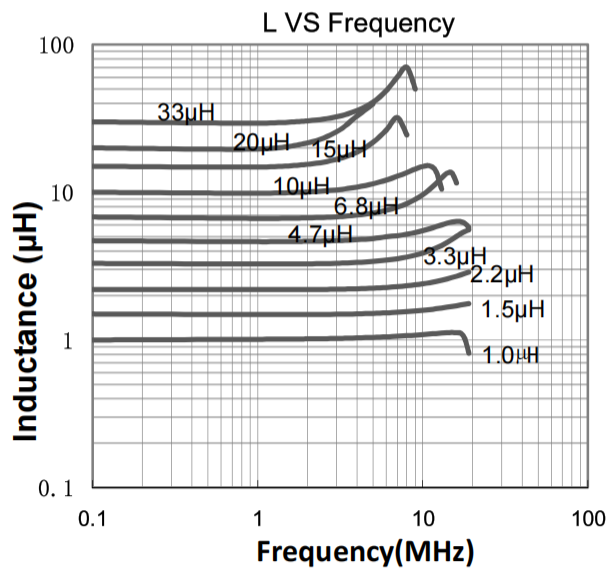
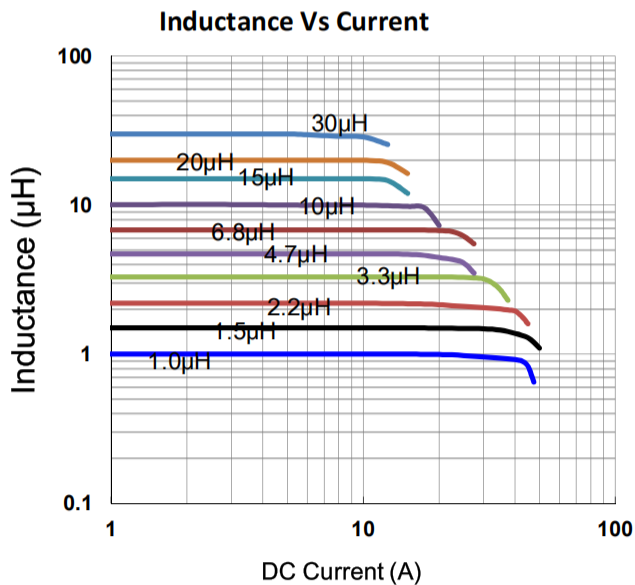


SCHEMATIC



PCB LAYOUT

Electrical Characteristic Curve 电气特性曲线



■ Packaging Specification - Tape and Reel: [mm]

包装规格 - 卷带包装: [mm]

