

## 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 时的无限车间寿命/ 85% 相对湿度)



## 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<br>料号 | Inductance<br>①<br>电感量<br>μH ±10% | DCR (mΩ)②<br>直流电阻<br>typ max |       | SRF ③<br>自谐振频率<br>(MHz)<br>reference | Isat ④<br>直流饱和电流<br>A typical<br>drop10% drop20% drop30% |      |      | Irms ⑤<br>温升电流<br>A typical<br>rise20°C rise40°C |      |
|-------------------|-----------------------------------|------------------------------|-------|--------------------------------------|----------------------------------------------------------|------|------|--------------------------------------------------|------|
|                   |                                   |                              |       |                                      |                                                          |      |      |                                                  |      |
| PR1908-102KL      | 1.0                               | 0.95                         | 1.05  | 81                                   | 46.6                                                     | 48.3 | 49.1 | 25.2                                             | 36.3 |
| PR1909-152KL      | 1.5                               | 1.35                         | 1.5   | 72                                   | 48.1                                                     | 49.2 | 50.2 | 23.4                                             | 30.2 |
| PR1910-222KL      | 2.2                               | 1.8                          | 2.0   | 45                                   | 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  |

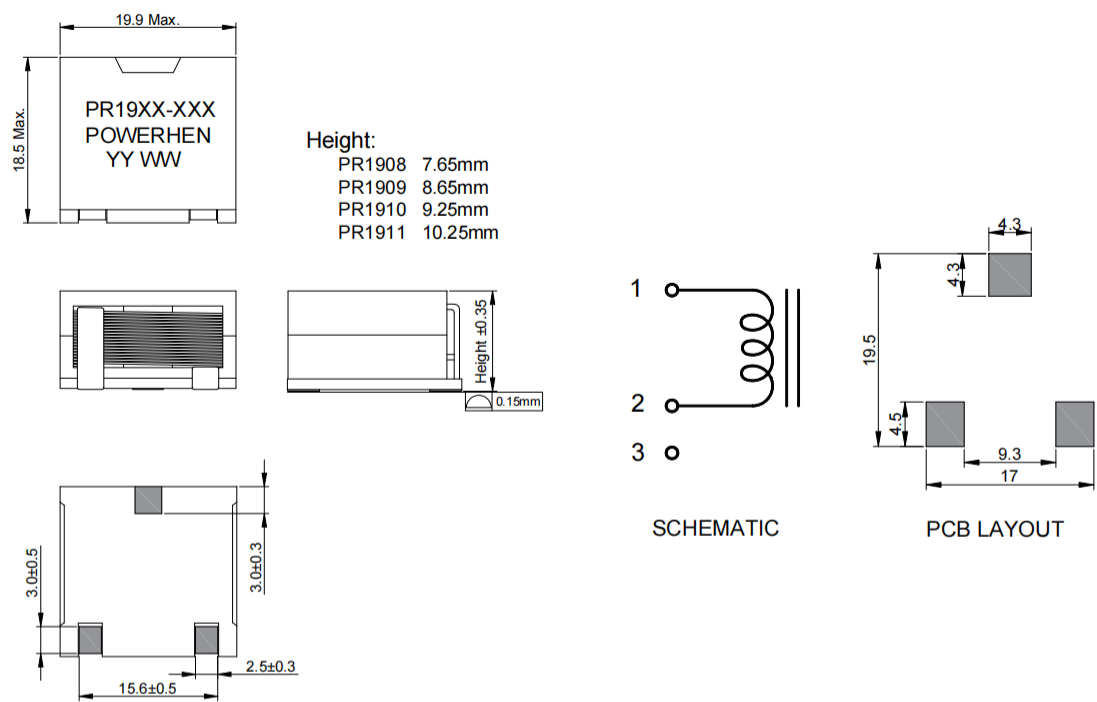
## Remark

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

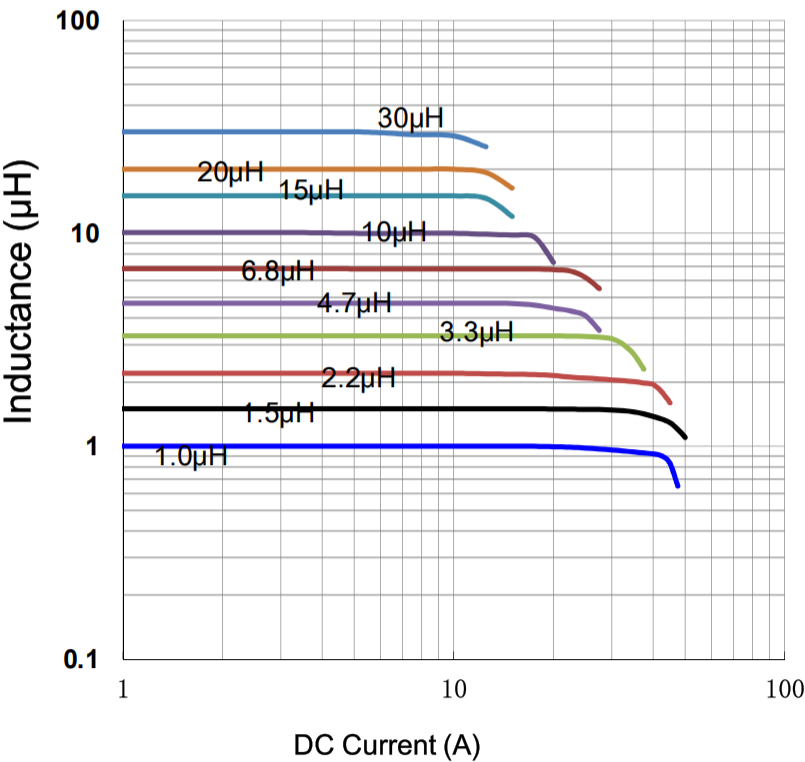
- ① 电感量测试采用 Agilent 4284A 数字电桥或同等仪器;  
测试频率 100kHz
- ② 直流电阻测试采用 Keithley 580 毫欧表或同等仪器;  
环境温度 25°C
- ③ SRF 使用 Agilent 4395A 网络分析仪和 Agilent 16093A 测试夹具测量。
- ④ 直流电流在 25°C, 加载导致指定电感从没有电流的值下降。
- ⑤ 导致指定温度从 25°C 环境温度上升的电流。此信息仅供参考, 不代表绝对最大额定值。
- ⑥ 25°C 时的电气规格

Dimension 结构尺寸



PR19XX Series

Electrical Characteristic Curve 电气特性曲线



■ Packaging Specification - Tape and Reel: [mm]

包装规格 - 卷带包装: [mm]

