

## SMD HIGH CURRENT POWER INDUCTOR

## 贴片大电流功率电感

## ■ PR16XX 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% 相对湿度时的无限制)



## Applications 应用

- 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 | Inductance①<br>电感量<br>μH ±10% | DCR (mΩ)②<br>直流电阻 |       | SRF ③<br>自谐振频率<br>(MHz)<br>reference | Isat ④<br>直流饱和电流<br>A typical |         |         | Irms⑤<br>温升电流<br>A typical |          |
|-------------------|-------------------------------|-------------------|-------|--------------------------------------|-------------------------------|---------|---------|----------------------------|----------|
|                   |                               | typ               | max   |                                      | drop10%                       | drop20% | drop30% | rise20°C                   | rise40°C |
| PR1607-102KL      | 1.0                           | 1.00              | 1.10  | 52                                   | 39.7                          | 40.4    | 40.7    | 25.2                       | 36.0     |
| PR1608-152KL      | 1.5                           | 1.40              | 1.54  | 48                                   | 38.9                          | 40.5    | 40.8    | 21.2                       | 30.0     |
| PR1609-222KL      | 2.2                           | 1.80              | 1.98  | 41                                   | 34.9                          | 37.3    | 38.8    | 20.1                       | 26.8     |
| PR1610-332KL      | 3.3                           | 2.20              | 2.42  | 38                                   | 28.7                          | 30.9    | 31.4    | 16.8                       | 25.0     |
| PR1610-472KL      | 4.7                           | 2.20              | 2.42  | 32                                   | 20.1                          | 21.5    | 22.8    | 16.8                       | 25.0     |
| PR1608-682KL      | 6.8                           | 6.20              | 6.82  | 27                                   | 16.9                          | 18.7    | 19.5    | 10.7                       | 14.4     |
| PR1608-103KL      | 10                            | 7.20              | 7.92  | 22                                   | 13.1                          | 14.6    | 15.4    | 9.4                        | 13.0     |
| PR1609-153KL      | 15                            | 10.20             | 11.22 | 18                                   | 12.7                          | 14      | 14.6    | 8.1                        | 11.7     |
| PR1610-203KL      | 20                            | 12.10             | 13.3  | 14                                   | 11.3                          | 12.4    | 12.9    | 7.3                        | 10.0     |
| PR1611-303KL      | 30                            | 15.40             | 16.94 | 12                                   | 9.7                           | 10.3    | 10.7    | 6.1                        | 8.5      |

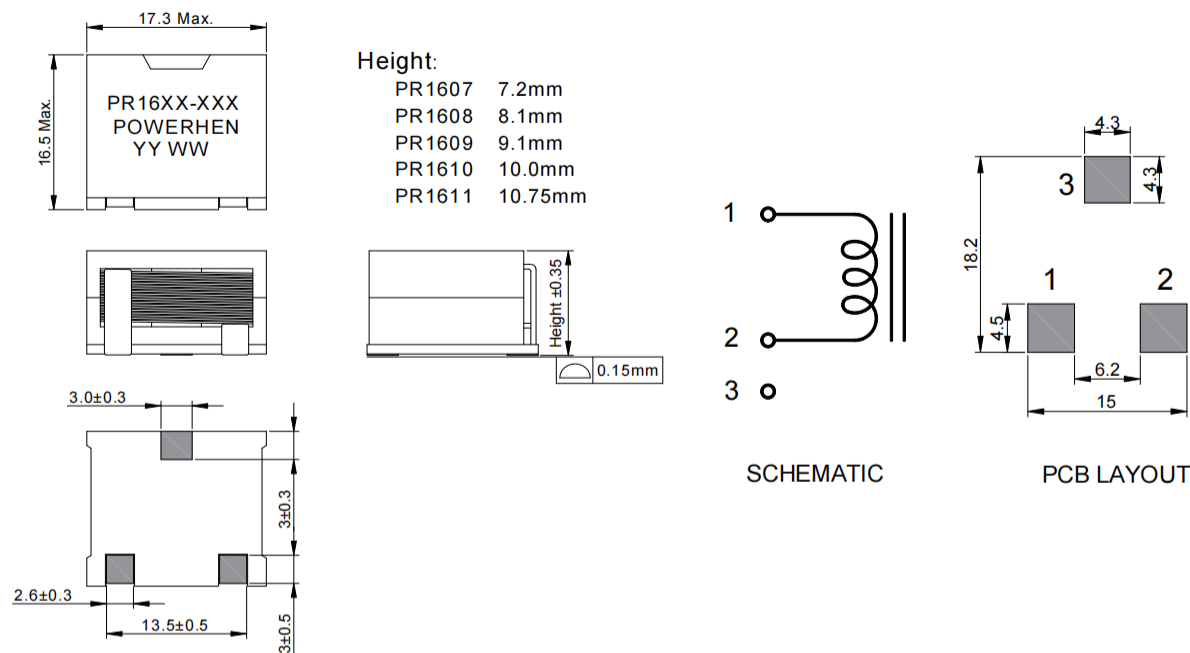
## Remark

- 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

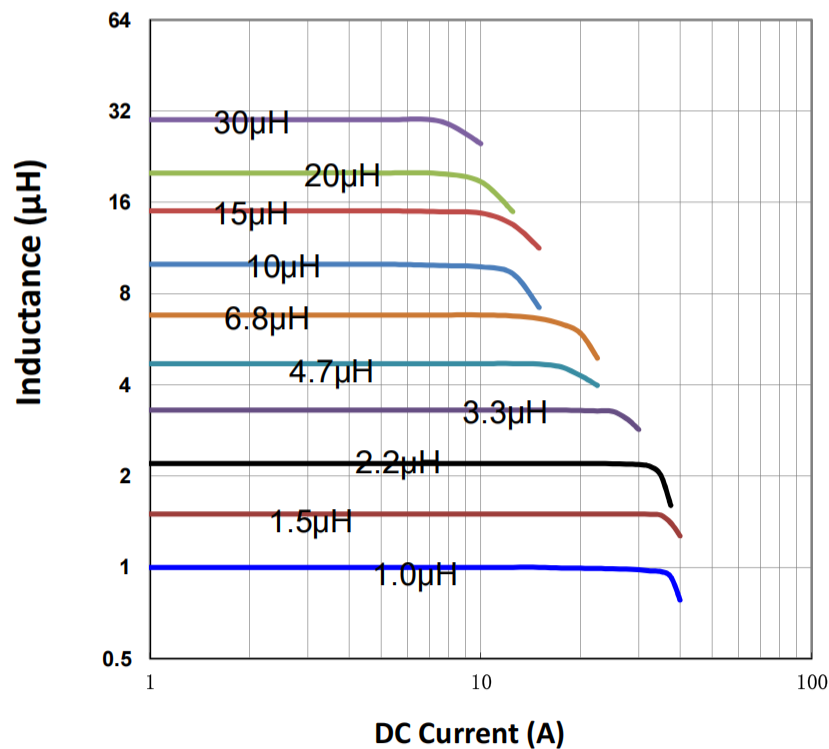
- ① 电感量测试采用 Agilent 4284A 数字电桥或同等仪器;  
测试频率 100KHz
- ② 直流电阻测试采用 Keithley 580 毫欧表或同等仪器;  
环境温度 25°C
- ③ SRF 使用 Agilent 4395A 网络分析仪和 Agilent 16093A 测试夹具测量。
- ④ 直流电流在 25°C, 加载导致指定电感从没有电流的值下降。
- ⑤ 导致指定温度从 25°C 环境温度上升的电流。此信息仅供参考, 不代表绝对最大额定值。
- ⑥ 25°C 时的电气规格

Dimension 结构尺寸



■PR16XX

Electrical Characteristic Curve 电气特性曲线



■ Packaging Specification - Tape and Reel: [mm]

包装规格 - 卷带包装: [mm]

