芯芒微电子

XINMANG MICROELECTRONICS

POWERHEN

Electronics

产品规格书

PR8050

贴片大电流功率电感

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样品申请 · 替代选型 · 批量报价，欢迎来函来电

HIGH CURRENT POWER INDUCTOR 大电流功率电感

■PR80XX

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℃~+125℃. 工作温度：-40℃~+125℃
- 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

Low DCR version for high average current applications

高平均电流应用的低直流电阻版本

Part number 料号	Inductance 电感量 μH±10%	DCR 直流电阻 mΩ Typ	DCR 直流电阻 mΩ Max	SRF 自谐频率 MHz typical	Isat 饱和电流 A typical 10% drop	Isat 饱和电流 A typical 20% drop	Isat 饱和电流 A typical 30% drop	Irms 温升电流 A typical 20℃rise	Irms 温升电流 A typical 40℃rise
PR8050-501KL	0.5	1.9	2.1	234	12.9	14.8	15.5	13.52	18
PR8050-112KL	1.1	2.75	3.03	109	8.2	9.8	10.5	11.97	17
PR8050-202KL	2.0	4.0	4.4	74	6.2	7.5	8.2	10.79	13.5
PR8050-312KL	3.1	5.9	6.5	63	4.72	5.8	6.4	8.7	10.8
PR8052-452KL	4.5	6.8	7.5	52	4	5	5.25	7.68	9.7
PR8052-612KL	6.1	8.2	9.0	45	3.6	4.2	4.7	6.31	8.3
PR8052-802KL	8.0	9.1	10	43	3.1	3.8	4.1	4.61	7.5
PR8052-103KL	10	13.03	14.3	40	2.68	3.2	3.5	4.57	6.5

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High Isat version for high peak current applications

高峰值电流应用高饱合电流版本

Part number 料号	Inductance 电感量 μH±10%	DCR 直流电阻 mΩ Typ	DCR 直流电阻 mΩ Max	SRF 自谐频率 MHz	Isat 饱和电流 A typical		Irms 温升电流 A typical		
				typical	10% drop	20% drop	30% drop	20℃rise	40℃rise
PR8050-201KL	0.2	2.1	2.3	255	37.5	40	41.8	13.52	18
PR8050-451KL	0.45	2.8	3.1	216	24	26.5	27.1	11.97	17
PR8050-801KL	0.8	4.0	4.4	125	18	19.4	20	10.79	13.5
PR8050-122KL	1.2	5.9	6.5	110	14.1	16.4	17	8.7	10.8
PR8052-182KL	1.8	6.8	7.5	91	12.1	13.5	13.8	7.68	9.7
PR8052-242KL	2.4	8.2	9.0	76	10.8	11.6	12.3	6.31	8.3
PR8052-322KL	3.2	9.1	10	72	8.8	9.8	10.2	4.61	7.5
PR8052-402KL	4.0	13.03	14.3	66	7.6	8.5	9	4.57	6.5

Remark

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

②DC 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.

④DC current at 25°C that causes the specified inductance drop from its value without current.

⑤Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

⑥Electrical 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

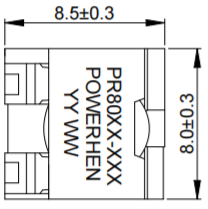
③SRF 使用 Agilent 4395A 网络分析仪和 Agilent 16193A 测试夹具测量。

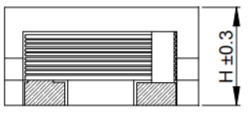
④直流电流在 25° C，加载导致指定电感从没有电流的值下降。

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。

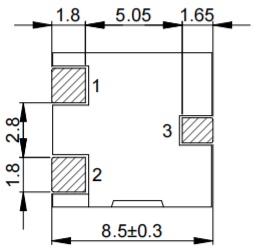
⑥25° C 时的电气规格

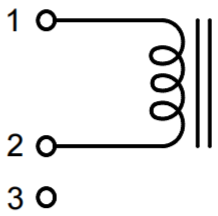
Dimensions 结构尺寸



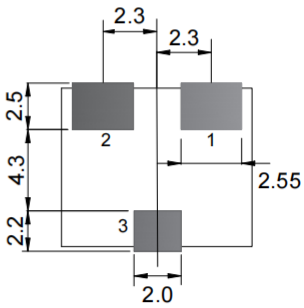


H(mm)
PR8050 5.0±0.3
PR8052 5.2±0.3





Terminal 3 is for mounting stability only.
SCHEMATIC



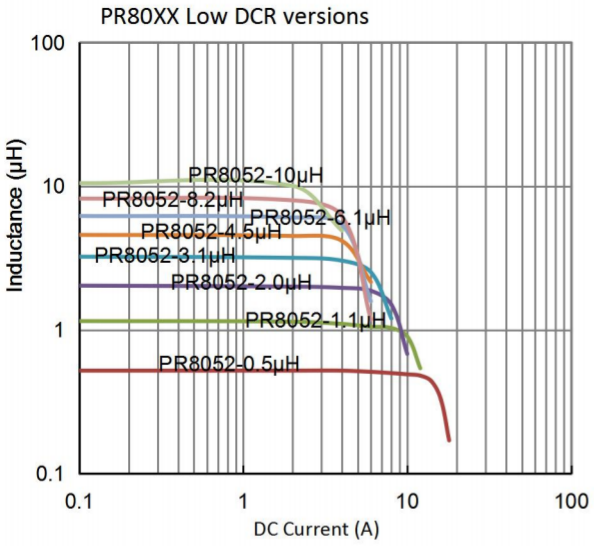
PCB LAYOUT

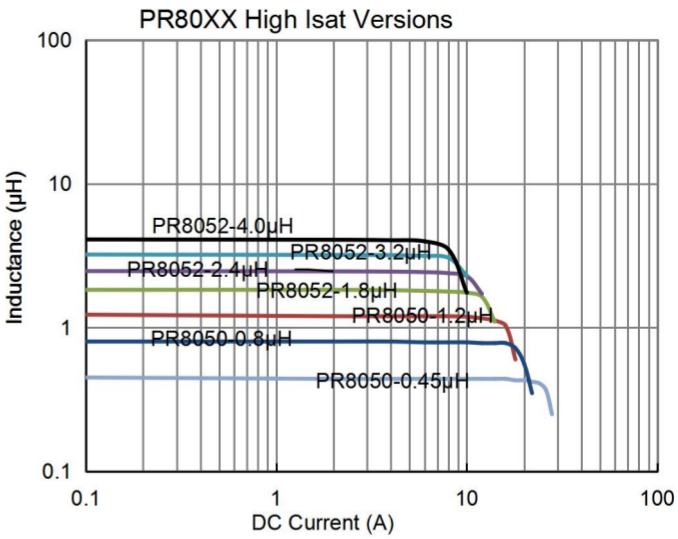
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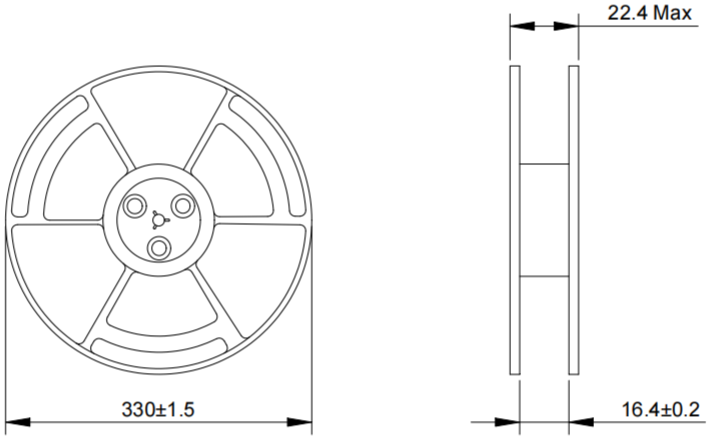
■ Electrical Characteristic Curve

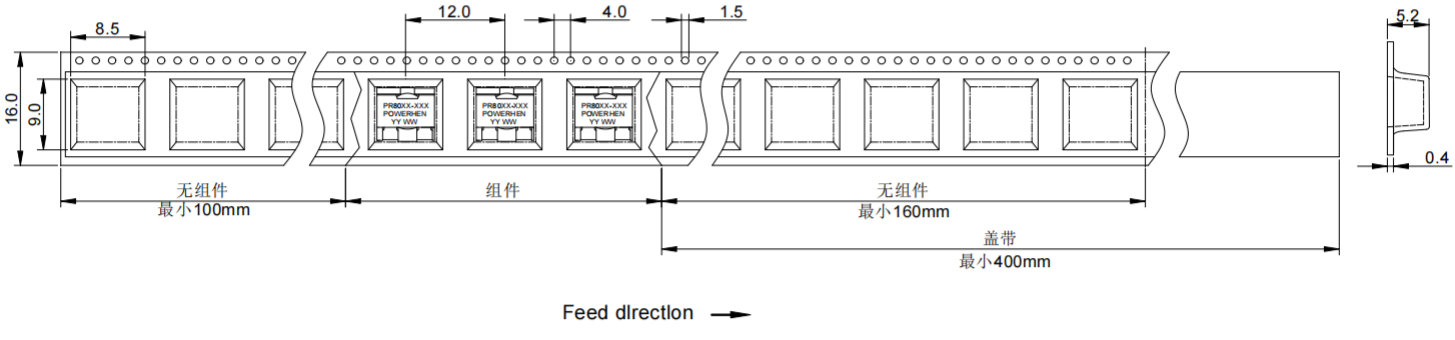




■Packaging Specification - Tape and Reel: [mm]

包装规格 - 卷带包装: [mm]





Weight 重量: 3.11~3.24g/PCS

Packaging 包装数量: 1000 PCS/Reel

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