

CS1010

High Current Air Core Inductors

高电流空心线圈电感

Features

- Air-core. Non magnetic saturation.
空心线圈，不会磁饱和。
- SMD type. Easy to install.
贴片类型，易于安装。
- RoHS compatible.
符合环保要求。
- Operating temperature : -40°C~+220°C.
工作温度：-40°C~+220°C



Electrical characteristics 电气特性

| Part number 料号 | Inductance 电感量 nH±20% | DCR 直流电阻 mΩ | | quality factor 品质因数 | | SRF 自谐频率 (MHz) | I _{rms} 温升电流 (A) | | Height 高度(mm) max |
|-------------------|-----------------------------|----------------|-----|------------------------|---------|----------------------|---------------------------------|-----------|-------------------------|
| | | typ | max | Q | 频率(MHz) | | 20°C rise | 40°C rise | |
| CS1010-230ML | 23.5 | 1.1 | 1.2 | 95 | 100 | 923 | 18.0 | 26.0 | 3.6 |
| CS1010-460ML | 46.5 | 1.5 | 1.6 | 150 | 100 | 526 | 17.9 | 25.5 | 4.1 |
| CS1010-790ML | 79 | 2.0 | 2.1 | 135 | 50 | 386 | 17.8 | 25.0 | 4.8 |
| CS1010-111ML | 111 | 2.5 | 1.2 | 150 | 50 | 382 | 15.7 | 22.0 | 5.6 |
| CS1010-141ML | 146 | 3.1 | 1.4 | 140 | 50 | 433 | 14.1 | 19.3 | 6.1 |

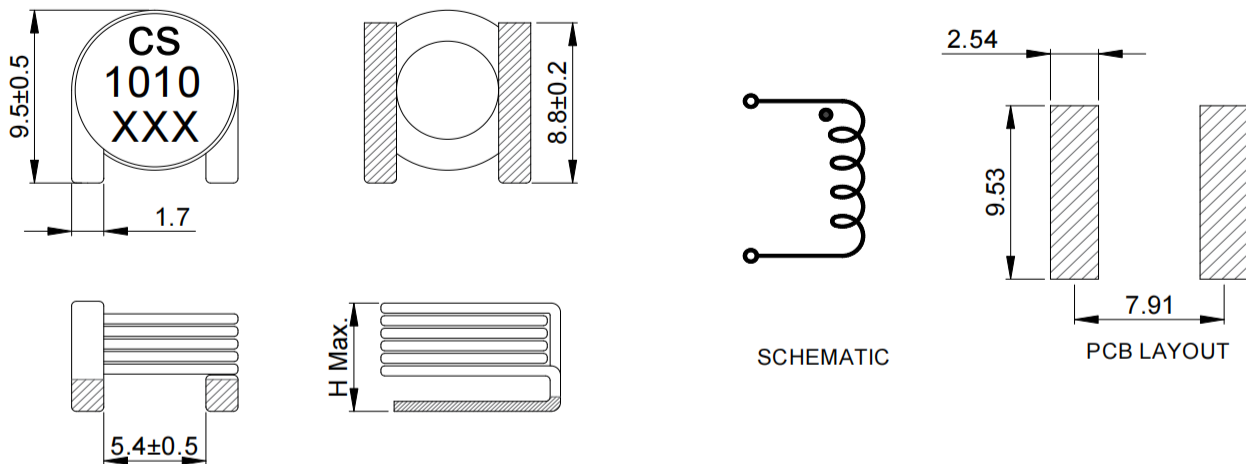
Remark

- ① Inductance is measured with a LCR meter Agilent 4284A or equivalent.
Test frequency at 1MHz
- ② DC resistance is measured with Keithley 580 Milliohm Meter, or equivalent. Reference ambient temperature 25°C
- ③ Q measured at the specified frequency using an Agilent/HP 4291A impedance analyzer or equivalent.
- ④ SRF measured using an Agilent E5061B network analyzer and an Agilent 16193A test fixture.
- 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

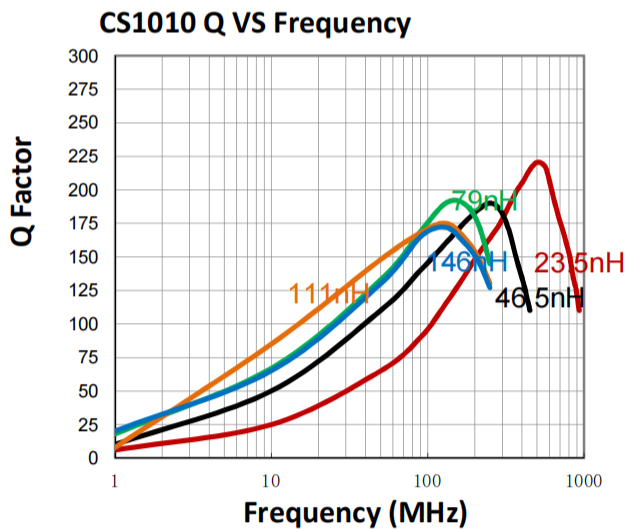
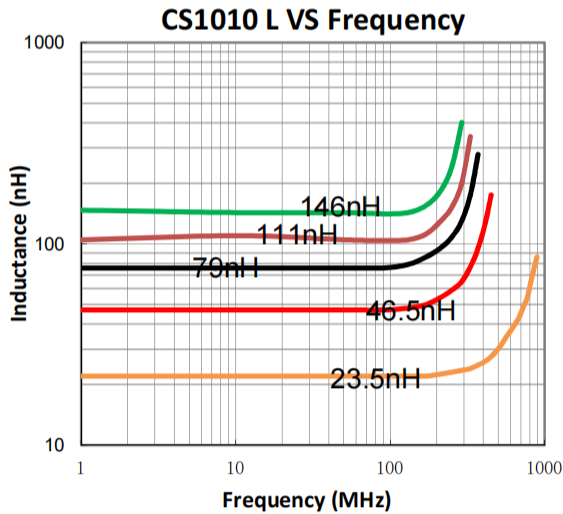
- ① 电感测试采用 Agilent 4284A 数字电桥或同等仪器；
测试频率 1MHz
- ② 直流电阻测试采用 Keithley 580 毫欧表或同等仪器；
环境温度 25°C
- ③ Q 使用安捷伦/HP 4291A 阻抗分析仪或同等产品在指定频率下测量。
- ④ SRF 使用 Agilent E5061B 网络分析仪和 Agilent 16193A 测试夹具测量。
- ⑤ 导致指定温度从 25°C 环境温度上升的电流。此信息仅供参考，不代表绝对最大额定值。
- ⑥ 25°C 时的电气规格

Dimensions 尺寸



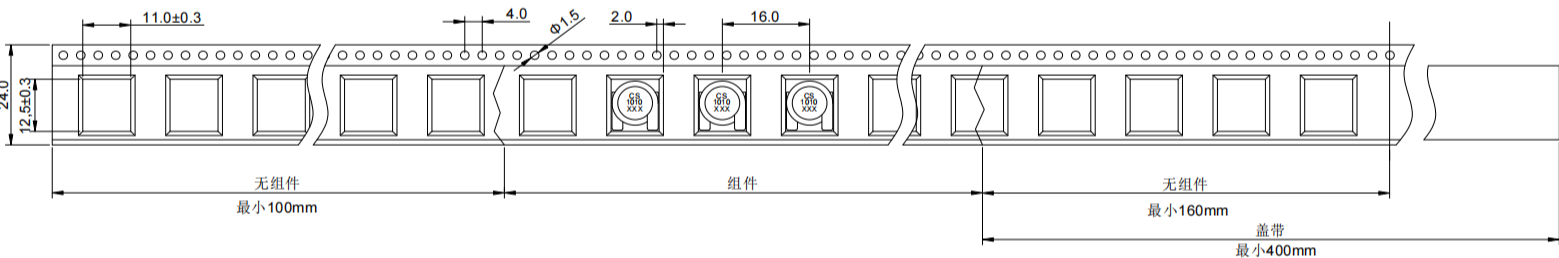
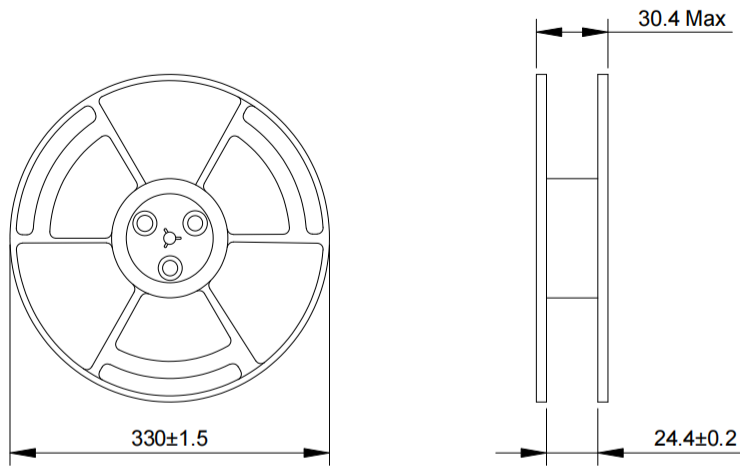
Electrical Characteristic Curve

电气性能曲线



■ Packaging Specification - Tape and Reel: [mm]

包装规格 - 卷带包装: [mm]



| Part Number | Lead Length (mm) | Lead Width (mm) | Weight (g/PCS) | Packaging Quantity (PCS/Reel) |
|-------------|------------------|-----------------|----------------|-------------------------------|
| CS1010-230 | 3.81 | 0.35 | 1.436g/PCS | 1000 PCS/Reel |
| CS1010-460 | 4.32 | 0.35 | 2.0g/PCS | 900 PCS/Reel |
| CS1010-790 | 5.05 | 0.35 | 2.57g/PCS | 800 PCS/Reel |
| CS1010-111 | 5.84 | 0.4 | 3.14g/PCS | 700 PCS/Reel |
| CS1010-141 | 6.35 | 0.4 | 3.7g/PCS | 600 PCS/Reel |