

## 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℃~+220℃.  
工作温度：-40℃~+220℃



## Electrical characteristics 电气特性

| Part number<br>料号 | Inductance<br>电感量<br>nH ± 20% | DCR<br>直流电阻 mΩ |     | quality factor<br>品质因数 |         | SRF<br>自谐频率<br>(MHz) | Irms<br>温升电流<br>(A) |           | Height<br>高度(mm)<br>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            | 2.7 | 150                    | 50      | 382                  | 15.7                | 22.0      | 5.6                     |
| CS1010-141ML      | 146                           | 3.1            | 3.3 | 140                    | 50      | 433                  | 14.1                | 19.3      | 6.1                     |

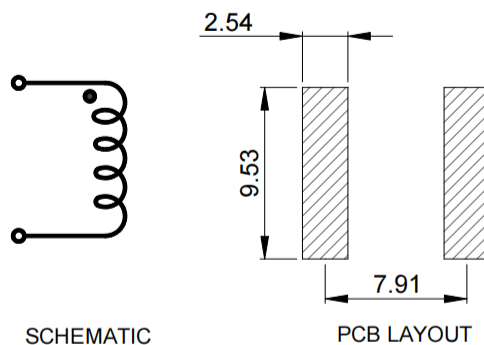
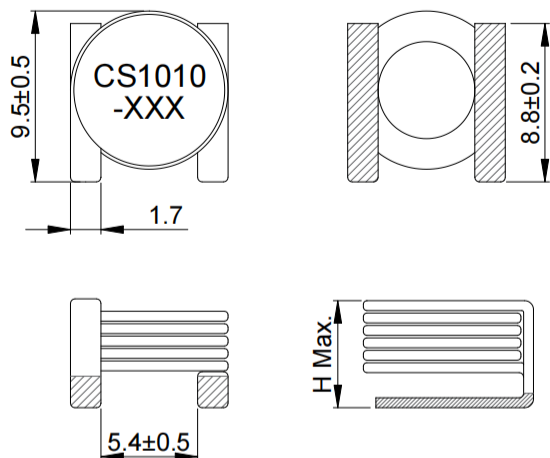
## Remark

- 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

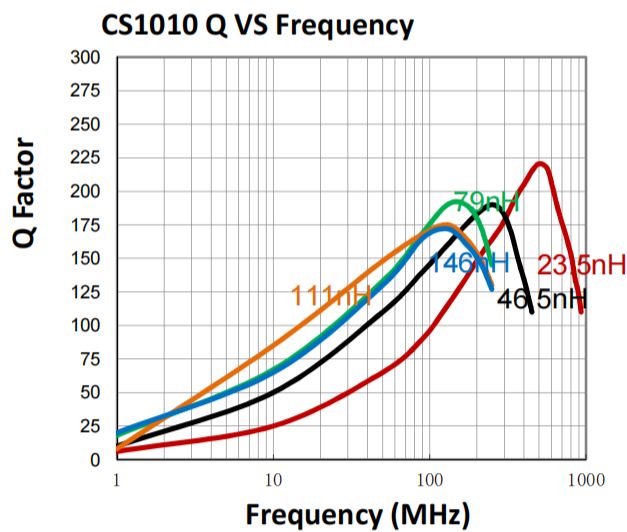
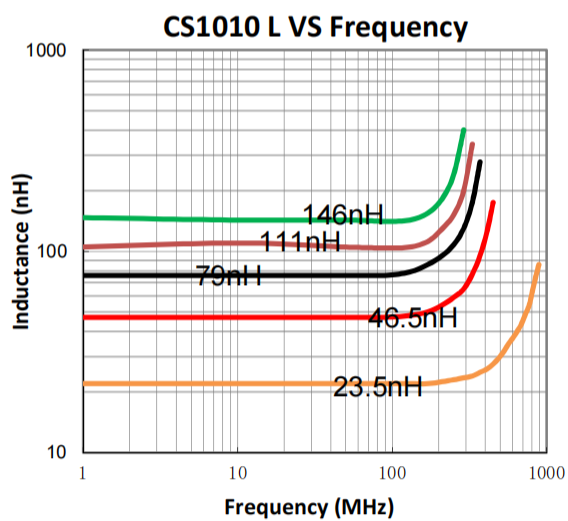
- ① 感量测试采用 Agilent 4284A 数字电桥或同等仪器；  
测试频率 1MHz
- ② 直流电阻测试采用 Keithley 580 毫欧表或同等仪器；  
环境温度 25° C
- ③ Q 使用安捷伦/HP 4291A 阻抗分析仪或同等产品在指定频率下测量。
- ④ SRF 使用 Agilent E5061B 网络分析仪和 Agilent 16193A 测试夹具测量。
- ⑤ 导致指定温度从 25° C 环境温度上升的电流。此信息仅供参考，不代表绝对最大额定值。
- ⑥ 25° C 时的电气规格

## 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]

