

## SR 系列磁棒电感 SR Series BAR Core Inductors



### 特征 Features

温度最高150°C High temperature, up to 150°C  
车载AEC-Q200标准 Compliant with AEC-Q200

### 应用 Applications

车载电子 Automotive electronics

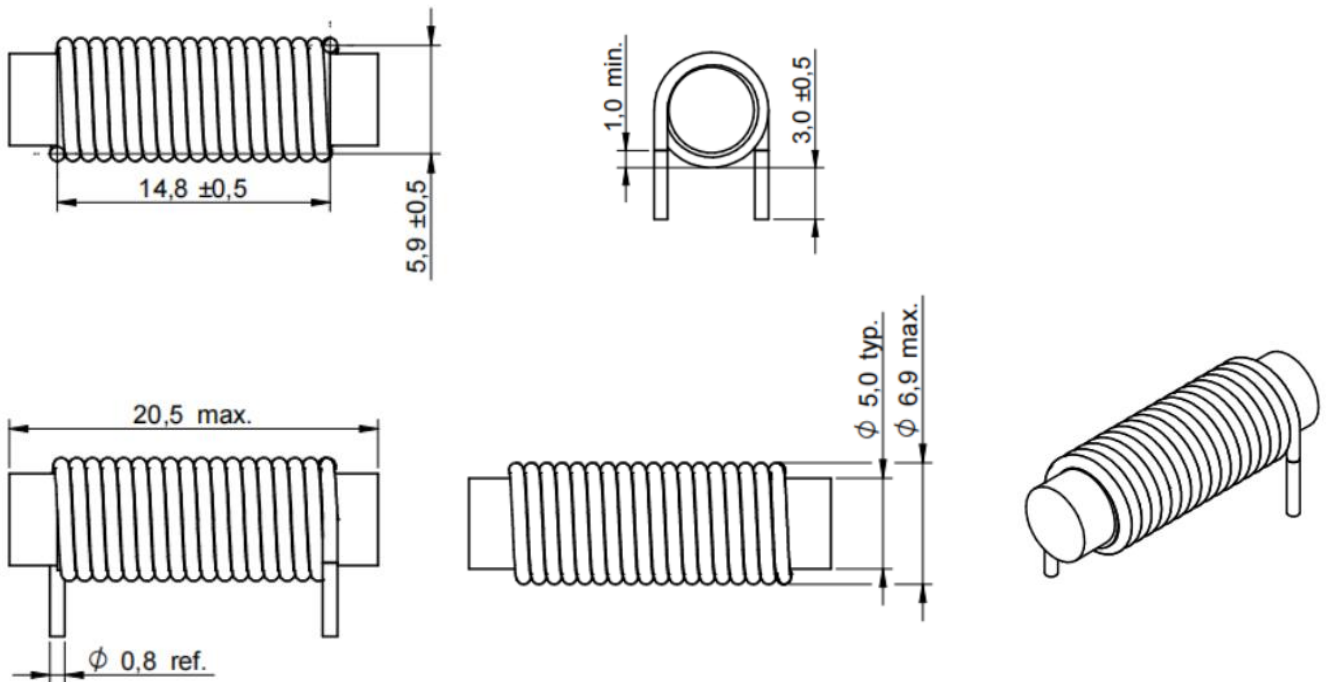


### 产品规格型号表示方法 How to Order

**SR0520** - **6R0** **P** **C**  
(1) (2) (3) (4)

- (1) 系列名称 Series Name
- (2) 电感值 Inductance( $\mu$ H)
- (3) 误差 Tolerance
- (4) 内部代码 Internal Code

### 外型尺寸 Dimensions (mm)



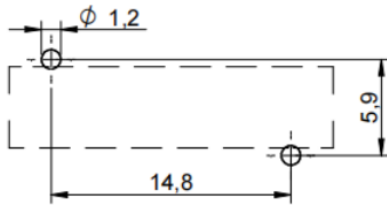
**性能参数 Electrical Characteristics**

规格型号 Part No.	感量 Inductance (μH)	直流电阻 Rdc(mΩ)	饱和电流 Isat(A) Typ.	温升电流 Irms(A) Typ.	自谐振频率 SRF(MHz) Typ.
SR0520-6R0PC	6.0±25%	11.7±20%	14.5	5.0	95

**备注 Remark:**

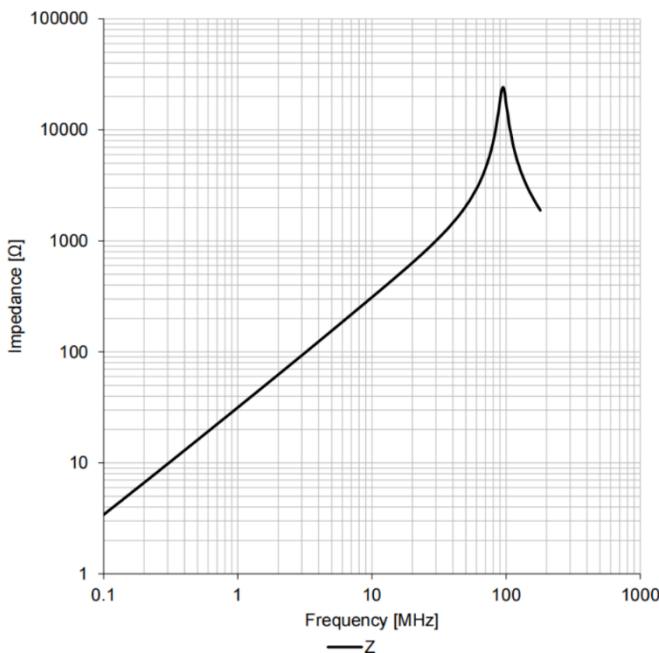
- 所有测试数据均参考18-25°C环境温度  
All test data is referenced to 18-25°C ambient;
- 电感测试条件为用WK3260B或同等设备以10KHz/5mA测试  
Inductance tested at 10KHz/5mA with WK3260B LCR Meter or equivalent;
- 饱和电流: 加电流时电感量下降小于或等于10%  
Isat: DC current at which the inductance drops 10% from its value without saturation;
- 温升电流: 加电流时产品温度上升小于等于40°C  
Irms: DC current that causes the temperature rise ( $\Delta T = 40^\circ\text{C}$ ) from ambient temperature;
- 工作温度 (包括自身发热) : -40°C~+ 150°C  
Operating temperature range (including coil's self-temperature rise): -40°C~+ 150°C.

**推荐焊接图 Recommended Hole Pattern: (mm)**

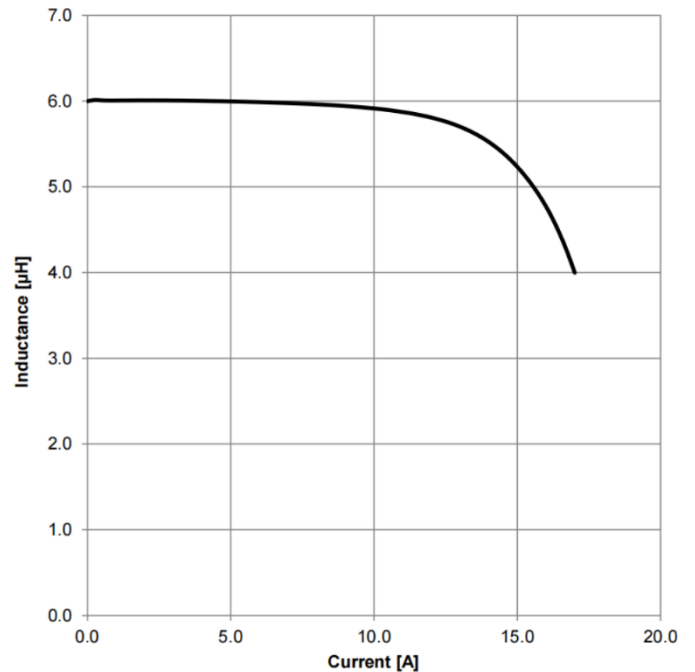


**特性曲线图 Characteristics Curve**

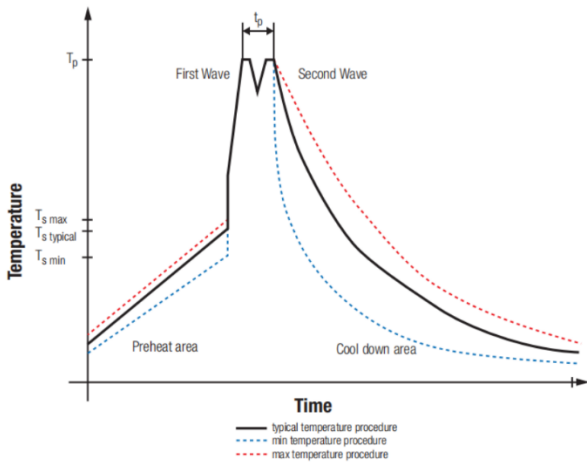
Typical Impedance Characteristics:



Typical Inductance vs. Current Characteristics:



## 推荐波峰焊曲线 Classification Wave Soldering Profile



Profile Feature	Lead-Free Assembly	Sn-Pb Assembly
Preheat Temperature Min ( $T_s$ min)	100°C	100°C
Preheat Temperature Typical ( $T_s$ typical)	120°C	120°C
Preheat Temperature Max ( $T_s$ max)	130°C	130°C
Preheat Time $t_s$ from $T_s$ min to $T_s$ max (ts)	70 seconds	70 seconds
Ramp-up Rate ( $\Delta T$ )	150 °C max.	150 °C max.
Peak Temperature ( $T_p$ )	250°C~260°C	235°C~260°C
Time of actual peak temperature ( $t_p$ )	max. 10 seconds max. 5 seconds each wave	max. 10 seconds max. 5 seconds each wave
Ramp-down Rate, Min	~ 2 K/ second	~ 2 K/ second
Ramp-down Rate, Typical	~ 3.5 K/ second	~ 3.5 K/ second
Ramp-down Rate, Max	~ 5 K/ second	~ 5 K/ second
Time 25 °C to 25 °C	4 minutes	4 minutes

refer to EN61760-1:2006

## 储存条件/注意的事项 Storage Conditions/Note Things

1、贮存温度、湿度条件 Storage temperature and humidity conditions :

1.1、产品包装与载体: -5°C ~ +40°C, 低于60% RH.

Product packing with Carrier tape: -5°C ~ +40°C and less than 60% RH.

1.2、单独的产品: -20°C ~ +60°C, 低于60% RH.

Product alone: -20°C ~ +60°C and less than 60% RH.

2、产品在6个月内使用(注意:产品一经拆开包装,须尽快使用).

Products should be used within 6 months.

(Note that the product should be used as soon as possible once it is folded) .

3、包装材料应保存在空气中不存在氯或硫的地方.

The packaging material should be kept where no chlorine or sulfur exists in the air.

4、不要用手指触摸电极(焊接端子),因为这可能导致焊接能力的下降.

Do not touch the electrodes (soldering terminals) with fingers as this may lead to deterioration of solderability.

5、个别零件强烈建议使用镊子或真空取料机散装搬运应减少磨损和机械冲击.

The use of tweezers or vacuum pick-ups is strongly recommended for individual components.

Bulk handling should ensure that abrasion and mechanical shock are minimized.