

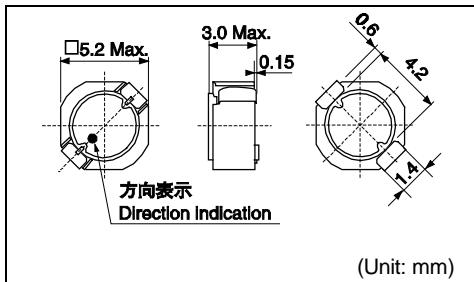
D53LC

85  
℃

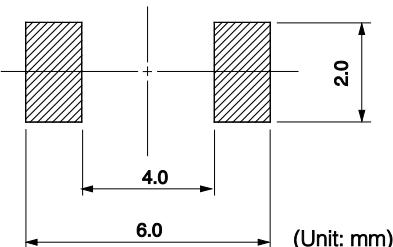
RoHS

REACH

Inductance Range: 1.1~220μH



### Recommended patterns 推荐焊盘尺寸



### FEATURES 特点

- Low profile (5.2mm Max. square, 3.0mm Max. height).
- Magnetically shielded construction and low DC resistance.
- Suitable for large currents.
- Ideal for a variety of DC-DC converter inductor applications
- Operating temperature (-40~+85°C).
- 薄型构造（最大5.2毫米的平面，最大高度3.0毫米）
- 磁性屏蔽结构和低直流电阻
- 适合大电流
- 是适用于多种DC-DC转换器电感器的理想选择
- 使用温度范围：-40 ~ +85°C

### STANDARD PART NUMBERS 标准零件号码

#### TYPE D53LC (High current Type, Quantity/reel; 2,000 PCS)

| 零件号码<br>Part Number | 电感值 <sup>(1)</sup><br>Inductance <sup>(1)</sup><br>(μH) | 公差<br>Tolerance<br>(%) | 最大直流电阻 <sup>(2)</sup><br>DC Resistance <sup>(2)</sup><br>(mΩ) Max. (Typ.) | 最大电感减小电流 <sup>(3)</sup> (典型) |   | 最大温度上升电流 <sup>(3)</sup> (典型)<br>Temperature Rise Current <sup>(3)</sup><br>ΔT=40°C (A) Max. (Typ.) |
|---------------------|---|------------------------|---|------------------------------|---|--|
|                     |   |                        |   | Inductance                   | Decrease Current <sup>(3)</sup><br>(A) Max. (Typ.)<br>$\frac{\Delta L}{L} = 10\%$ |  |
| #A915AY-1R1M=P3     | 1.1   | ± 20                   | 20 (16)   | 3.38 (4.50)                  | 3.87 (5.17)   | 3.46 (4.07)  |
| #A915AY-2R0M=P3     | 2.0   | ± 20                   | 27 (22)   | 2.53 (3.38)                  | 2.92 (3.90)   | 2.80 (3.30)  |
| #A915AY-3R3M=P3     | 3.3   | ± 20                   | 34 (29)   | 2.01 (2.68)                  | 2.36 (3.15)   | 2.40 (2.83)  |
| #A915AY-4R7M=P3     | 4.7   | ± 20                   | 45 (38)   | 1.52 (2.03)                  | 1.87 (2.49)   | 2.13 (2.51)  |
| #A915AY-6R8M=P3     | 6.8   | ± 20                   | 68 (57)   | 1.24 (1.66)                  | 1.51 (2.01)   | 1.75 (2.06)  |
| #A915AY-100M=P3     | 10  | ± 20                   | 90 (75)   | 1.09 (1.46)                  | 1.33 (1.77)   | 1.49 (1.76)  |
| #A915AY-150M=P3     | 15  | ± 20                   | 142 (118)   | 0.88 (1.17)                  | 1.05 (1.40)   | 1.16 (1.37)  |
| #A915AY-220M=P3     | 22  | ± 20                   | 208 (173)   | 0.71 (0.95)                  | 0.86 (1.15)   | 0.86 (1.01)  |
| #A915AY-330M=P3     | 33  | ± 20                   | 257 (214)   | 0.61 (0.81)                  | 0.72 (0.96)   | 0.80 (0.94)  |
| #A915AY-470M=P3     | 47  | ± 20                   | 352 (293)   | 0.53 (0.71)                  | 0.62 (0.83)   | 0.68 (0.80)  |
| #A915AY-680M=P3     | 68  | ± 20                   | 525 (437)   | 0.43 (0.57)                  | 0.51 (0.68)   | 0.55 (0.65)  |
| #A915AY-101M=P3     | 100   | ± 20                   | 801 (667)   | 0.37 (0.49)                  | 0.43 (0.58)   | 0.46 (0.55)  |

#### TYPE D53LC (Low DC resistance Type, Quantity/reel; 2,000 PCS)

| 零件号码<br>Part Number | 电感值 <sup>(1)</sup><br>Inductance <sup>(1)</sup><br>(μH) | 公差<br>Tolerance<br>(%) | 最大直流电阻 <sup>(2)</sup><br>DC Resistance <sup>(2)</sup><br>(mΩ) Max. (Typ.) | 最大电感减小电流 <sup>(3)</sup> (典型) |   | 最大温度上升电流 <sup>(3)</sup> (典型)<br>Temperature Rise Current <sup>(3)</sup><br>ΔT=40°C (A) Max. (Typ.) |
|---------------------|---|------------------------|---|------------------------------|---|--|
|                     |   |                        |   | Inductance                   | Decrease Current <sup>(3)</sup><br>(A) Max. (Typ.)<br>$\frac{\Delta L}{L} = 10\%$ |  |
| #A915BY-4R7M=P3     | 4.7   | ± 20                   | 35 (29)   | 0.91 (1.21)                  | 1.13 (1.51)   | 2.31 (2.72)  |
| #A915BY-6R8M=P3     | 6.8   | ± 20                   | 50 (42)   | 0.81 (1.08)                  | 0.99 (1.32)   | 1.93 (2.27)  |
| #A915BY-100M=P3     | 10  | ± 20                   | 67 (56)   | 0.59 (0.79)                  | 0.74 (0.99)   | 1.60 (1.88)  |
| #A915BY-150M=P3     | 15  | ± 20                   | 97 (81)   | 0.45 (0.60)                  | 0.58 (0.77)   | 1.36 (1.60)  |
| #A915BY-220M=P3     | 22  | ± 20                   | 135 (112)   | 0.40 (0.54)                  | 0.51 (0.68)   | 1.19 (1.40)  |
| #A915BY-330M=P3     | 33  | ± 20                   | 206 (172)   | 0.33 (0.45)                  | 0.41 (0.55)   | 0.92 (1.09)  |
| #A915BY-470M=P3     | 47  | ± 20                   | 268 (224)   | 0.27 (0.36)                  | 0.34 (0.46)   | 0.80 (0.94)  |
| #A915BY-680M=P3     | 68  | ± 20                   | 371 (309)   | 0.23 (0.30)                  | 0.29 (0.39)   | 0.68 (0.80)  |
| #A915BY-101M=P3     | 100   | ± 20                   | 569 (474)   | 0.21 (0.28)                  | 0.26 (0.35)   | 0.54 (0.64)  |
| #A915BY-151M=P3     | 150   | ± 20                   | 940 (785)   | 0.18 (0.23)                  | 0.21 (0.28)   | 0.40 (0.47)  |
| #A915BY-221M=P3     | 220   | ± 20                   | 1200 (995)  | 0.15 (0.20)                  | 0.18 (0.24)   | 0.35 (0.41)  |

(1) Inductance is measured with a LCR meter 4284A (Agilent Technologies) or equivalent.

(1) LCR仪表4284A (Agilent技术)或者功能相同的仪器在100kHz下测试电感值。

Test frequency at 100kHz

(2) DC resistance is measured with 34420A (Agilent Technologies) or 3541(HIOKI). (Reference ambient temperature 25°C)

(2) DC resistance is measured with 34420A (Agilent Technologies) or 3541(HIOKI). (Reference ambient temperature 25°C)

(2) 通过数码万用表34420A (Agilent技术) 或者3541(HIOKI)测试直流电阻。 (环境温度为25°C)

(3) Maximum allowable DC current is that which causes a 30% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C)

(3) 允许最大直流电的范围是以下两者中比较小的一个：引起电感值从最初值降低30%，或者线圈温度升高40°C。  
(参考周围环境温度20°C)。