

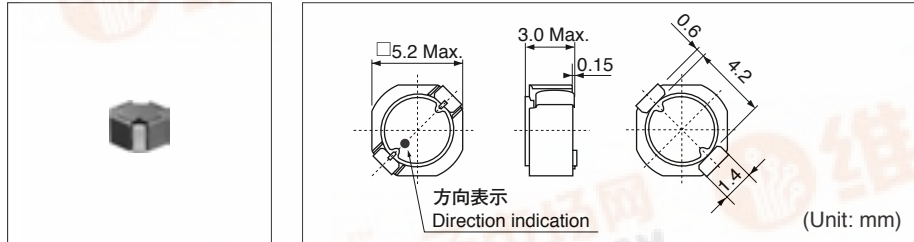


Fixed Inductors for Surface Mounting 面実装用 固定インダクタ

■ D53LC ■

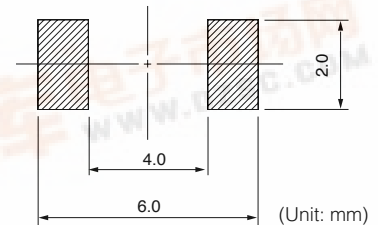
Inductance Range: 1.1~220μH

DIMENSIONS / 外形寸法図



Recommended patterns

推奨パターン図



FEATURES / 特長

- 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.
- RoHS compliant.

- 小型薄形構造 (5.2mm角Max.、高さ3.0mm Max.)
- 閉磁路構造、低直流抵抗
- 大電流対応
- 各種機器のDC-DCコンバータ用インダクタに最適
- RoHS指令対応

SELECTION GUIDE FOR STANDARD COILS

TYPE D53LC (High current Type 大電流タイプ, Quantity/reel; 2,000 PCS)

| 東光品番 | インダクタンス ⁽¹⁾ | 許容差 | 直流抵抗 ⁽²⁾ | 直流重畳許容電流 ⁽³⁾ | | 温度上昇許容電流 ⁽³⁾ |
|------------------|--------------------------------|---------------|---|--|-------------|---|
| TOKO Part Number | Inductance ⁽¹⁾ (μH) | Tolerance (%) | DC Resistance ⁽²⁾ (mΩ) Max. (Typ.) | Inductance Decrease Current ⁽³⁾ (A) Max. (Typ.) | | Temperature Rise Current ⁽³⁾ ΔT=40°C (A) Max. (Typ.) |
| | | | | ΔL/L=10% | ΔL/L=30% | |
| #A915AY-1R1M | 1.1 | ± 20 | 20 (16) | 3.38 (4.50) | 3.87 (5.17) | 3.46 (4.07) |
| #A915AY-2R0M | 2.0 | ± 20 | 27 (22) | 2.53 (3.38) | 2.92 (3.90) | 2.80 (3.30) |
| #A915AY-3R3M | 3.3 | ± 20 | 34 (29) | 2.01 (2.68) | 2.36 (3.15) | 2.40 (2.83) |
| #A915AY-4R7M | 4.7 | ± 20 | 45 (38) | 1.52 (2.03) | 1.87 (2.49) | 2.13 (2.51) |
| #A915AY-6R8M | 6.8 | ± 20 | 68 (57) | 1.24 (1.66) | 1.51 (2.01) | 1.75 (2.06) |
| #A915AY-100M | 10.0 | ± 20 | 90 (75) | 1.09 (1.46) | 1.33 (1.77) | 1.49 (1.76) |
| #A915AY-150M | 15.0 | ± 20 | 142 (118) | 0.88 (1.17) | 1.05 (1.40) | 1.16 (1.37) |
| #A915AY-220M | 22.0 | ± 20 | 208 (173) | 0.71 (0.95) | 0.86 (1.15) | 0.86 (1.01) |
| #A915AY-330M | 33.0 | ± 20 | 257 (214) | 0.61 (0.81) | 0.72 (0.96) | 0.80 (0.94) |
| #A915AY-470M | 47.0 | ± 20 | 352 (293) | 0.53 (0.71) | 0.62 (0.83) | 0.68 (0.80) |
| #A915AY-680M | 68.0 | ± 20 | 525 (437) | 0.43 (0.57) | 0.51 (0.68) | 0.55 (0.65) |
| #A915AY-101M | 100.0 | ± 20 | 801 (667) | 0.37 (0.49) | 0.43 (0.58) | 0.46 (0.55) |

TYPE D53LC (Low DC resistance Type 低直流抵抗タイプ, Quantity/reel; 2,000 PCS)

| 東光品番 | インダクタンス ⁽¹⁾ | 許容差 | 直流抵抗 ⁽²⁾ | 直流重畳許容電流 ⁽³⁾ | | 温度上昇許容電流 ⁽³⁾ |
|------------------|--------------------------------|---------------|---|--|-------------|---|
| TOKO Part Number | Inductance ⁽¹⁾ (μH) | Tolerance (%) | DC Resistance ⁽²⁾ (mΩ) Max. (Typ.) | Inductance Decrease Current ⁽³⁾ (A) Max. (Typ.) | | Temperature Rise Current ⁽³⁾ ΔT=40°C (A) Max. (Typ.) |
| | | | | ΔL/L=10% | ΔL/L=30% | |
| #A915BY-4R7M | 4.7 | ± 20 | 35 (29) | 0.91 (1.21) | 1.13 (1.51) | 2.31 (2.72) |
| #A915BY-6R8M | 6.8 | ± 20 | 50 (42) | 0.81 (1.08) | 0.99 (1.32) | 1.93 (2.27) |
| #A915BY-100M | 10.0 | ± 20 | 67 (56) | 0.59 (0.79) | 0.74 (0.99) | 1.60 (1.88) |
| #A915BY-150M | 15.0 | ± 20 | 97 (81) | 0.45 (0.60) | 0.58 (0.77) | 1.36 (1.60) |
| #A915BY-220M | 22.0 | ± 20 | 135 (112) | 0.40 (0.54) | 0.51 (0.68) | 1.19 (1.40) |
| #A915BY-330M | 33.0 | ± 20 | 206 (172) | 0.33 (0.45) | 0.41 (0.55) | 0.92 (1.09) |
| #A915BY-470M | 47.0 | ± 20 | 268 (224) | 0.27 (0.36) | 0.34 (0.46) | 0.80 (0.94) |
| #A915BY-680M | 68.0 | ± 20 | 371 (309) | 0.23 (0.30) | 0.29 (0.39) | 0.68 (0.80) |
| #A915BY-101M | 100.0 | ± 20 | 569 (474) | 0.21 (0.28) | 0.26 (0.35) | 0.54 (0.64) |
| #A915BY-151M | 150.0 | ± 20 | 940 (785) | 0.18 (0.23) | 0.21 (0.28) | 0.40 (0.47) |
| #A915BY-221M | 220.0 | ± 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.

Test frequency at 100kHz

(2) DC resistance is measured with a Digital Multimeter TR6871 (Advantest) or equivalent.

(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)

(1) インダクタンスはLCRメータ4284A (Agilent Technologies) または同等品により測定する。

測定周波数は100kHzです。

(2) 直流抵抗はデジタルマルチメータTR6871 (Advantest) または同等品により測定する。

(3) 最大許容電流は、直流重畳電流を流した時インダクタンスの値が初期値より30%減少する直流電流値、または直流電流により、コイルの温度が40°C上昇の何れか小さい値です。(周囲温度20°Cを基準とする。)

