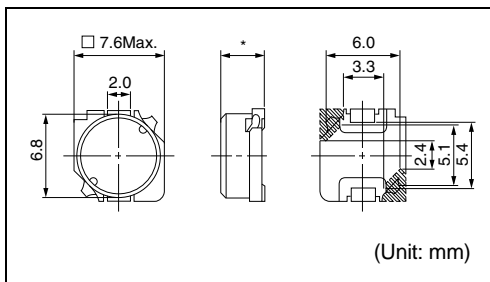


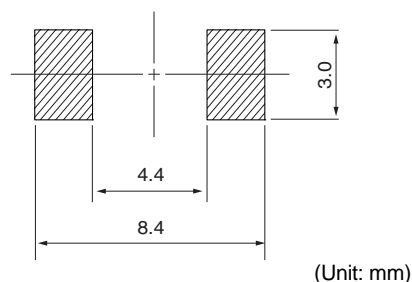
# DH75C

Inductance Range: 1.2~680μH

## DIMENSIONS / 外形寸法図



## Recommended patterns 推奨パターン図



## FEATURES / 特長

- High reliability for vehicle application.
- Operating temperature range : -55°C~+125°C
- Low profile (7.6mm Max. square, 5.1mm 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.
- 車載機器向け信頼性向上品
- 使用温度範囲：-55°C ~ +125°C
- 小型薄形構造(7.6mm角Max. 高さ5.1mm 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 DH75C (With Ferrite Shield) 閉磁路タイプ(リングコア有り) (Quantity/reel; 1,000 PCS)

| 東光品番             | インダクタンス <sup>(1)</sup>           | 許容差           | 直流抵抗 <sup>(2)</sup>                    | 直流重畳許容電流 <sup>(3)</sup>   | 温度上昇許容電流 <sup>(3)</sup>                                  |
|------------------|----------------------------------|---------------|--|---|--|
| TOKO Part Number | Inductance <sup>(1)</sup> L (μH) | Tolerance (%) | DC Resistance <sup>(2)</sup> (mΩ) Max. | Inductance Decrease Current <sup>(3)</sup> (A) Max. $\frac{\Delta L}{L} = 30\%$ | Temperature Rise Current <sup>(3)</sup> ΔT=20°C (A) Max. |
| A1007AY-1R2M     | 1.2                              | ± 20          | 22                                     | 4.30  | 3.00   |
| A1007AY-2R4M     | 2.4                              | ± 20          | 29                                     | 3.00  | 2.50   |
| A1007AY-3R3M     | 3.3                              | ± 20          | 32                                     | 2.60  | 2.30   |
| A1007AY-5R1M     | 5.1                              | ± 20          | 39                                     | 2.10  | 2.10   |
| A1007AY-7R5M     | 7.5                              | ± 20          | 46                                     | 1.80  | 1.90   |
| A1007AY-100M     | 10.0                             | ± 20          | 53                                     | 1.50  | 1.80   |
| A1007AY-150M     | 15.0                             | ± 20          | 74                                     | 1.20  | 1.50   |
| A1007AY-220M     | 22.0                             | ± 20          | 105                                    | 0.98  | 1.20   |
| A1007AY-330M     | 33.0                             | ± 20          | 160                                    | 0.81  | 0.96   |
| A1007AY-470M     | 47.0                             | ± 20          | 195                                    | 0.68  | 0.88   |
| A1007AY-680M     | 68.0                             | ± 20          | 300                                    | 0.57  | 0.69   |
| A1007AY-101M     | 100.0                            | ± 20          | 435                                    | 0.48  | 0.53   |
| A1007AY-151M     | 150.0                            | ± 20          | 555                                    | 0.38  | 0.47   |
| A1007AY-221M     | 220.0                            | ± 20          | 795                                    | 0.32  | 0.40   |
| A1007AY-331M     | 330.0                            | ± 20          | 1320                                   | 0.26  | 0.31   |
| A1007AY-471M     | 470.0                            | ± 20          | 1560                                   | 0.21  | 0.28   |
| A1007AY-681M     | 680.0                            | ± 20          | 2520                                   | 0.18  | 0.22   |

(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 inductance decrease current, or temperature rise current, whichever is smaller.

• Inductance decrease current : The inductance value decreases 30% by the excitation of DC current. (reference ambient temperature 125°C)

• Temperature rise current : The temperature rises 20°C by excitation of DC current. (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：直流重畳許容電流値と温度上昇許容電流値の何れか小さい値です。

• 直流重畳許容電流：直流重畳特性においてインダクタンス値が30%低下した時の電流値。(周囲温度125°C)

• 温度上昇許容電流：直流を流した時の巻線温度上昇が20°Cに達する電流値。(周囲温度20°C)