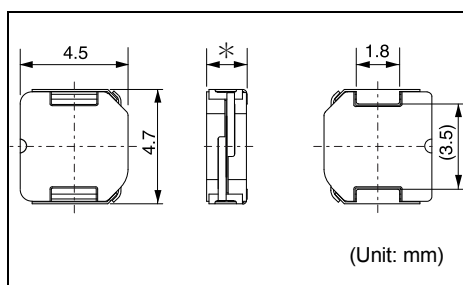


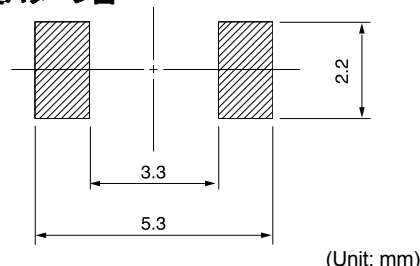
# DE4514C/DEM4518C

Inductance Range: 1.2~33μH (DE4514C), 1.2~22μH (DEM4518C)



\*DE4514C: 1.4mm Max.  
DEM4518C: 1.8mm Max.

## Recommended patterns 推奨パターン図



(Unit: mm)

## FEATURES 特長

- Low profile (4.5×4.7mm square, 1.4 and 1.8mm Max. height).
- Magnetically shielded construction and low DC resistance.
- Ideal for a variety of DC-DC converter inductor applications. (DVC,DSC,Cellular phone,PDA)
- RoHS compliant.
- 小型薄形構造(4.5×4.7mm角, 高さ1.4および1.8mm Max.)
- 閉磁路構造、低直流抵抗
- 各種機器のDC-DCコンバータ用インダクタに最適 (DVC,DSC,Cellular phone,PDA)
- RoHS指令対応

## TOKO STANDARD PART NUMBERS 東光 標準品一覧

### TYPE DE4514C (Magnetically Shielded) 閉磁路タイプ (Quantity/reel; 2,000 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>                           | 直流重量許容電流 <sup>(3)</sup>                                                                   | 温度上昇許容電流 <sup>(3)</sup>                                         |
|------------------|--------------------------------|---------------|-----------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| TOKO Part Number | Inductance <sup>(1)</sup> (μH) | Tolerance (%) | DC Resistance <sup>(2)</sup> (mΩ) Max. (Typ.) | Inductance Decrease Current <sup>(3)</sup> (A) Max. (Typ.)<br>$\frac{\Delta L}{L} = 30\%$ | Temperature Rise Current <sup>(3)</sup> ΔT=40°C (A) Max. (Typ.) |
| 1123AS-1R2N      | 1.2                            | ±30           | 60 (50)                                       | 2.60 (3.45)                                                                               | 2.45 (2.85)                                                     |
| 1123AS-1R8N      | 1.8                            | ±30           | 72 (60)                                       | 2.20 (2.95)                                                                               | 2.20 (2.60)                                                     |
| 1123AS-2R4M      | 2.4                            | ±20           | 84 (70)                                       | 1.90 (2.55)                                                                               | 2.00 (2.35)                                                     |
| 1123AS-3R3M      | 3.3                            | ±20           | 96 (80)                                       | 1.70 (2.25)                                                                               | 1.90 (2.25)                                                     |
| 1123AS-4R7M      | 4.7                            | ±20           | 120 (100)                                     | 1.45 (1.90)                                                                               | 1.55 (1.85)                                                     |
| 1123AS-6R8M      | 6.8                            | ±20           | 156 (130)                                     | 1.20 (1.55)                                                                               | 1.40 (1.65)                                                     |
| 1123AS-100M      | 10.0                           | ±20           | 192 (160)                                     | 1.00 (1.35)                                                                               | 1.25 (1.50)                                                     |
| 1123AS-120M      | 12.0                           | ±20           | 228 (190)                                     | 0.90 (1.20)                                                                               | 1.10 (1.30)                                                     |
| 1123AS-150M      | 15.0                           | ±20           | 276 (230)                                     | 0.80 (1.05)                                                                               | 1.00 (1.20)                                                     |
| 1123AS-220M      | 22.0                           | ±20           | 444 (370)                                     | 0.65 (0.89)                                                                               | 0.75 (0.89)                                                     |
| 1123AS-330M      | 33.0                           | ±20           | 648 (540)                                     | 0.55 (0.75)                                                                               | 0.63 (0.75)                                                     |

### TYPE DEM4518C (Magnetically Shielded) 閉磁路タイプ (Quantity/reel; 2,000 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>                           | 直流重量許容電流 <sup>(3)</sup>                                                                   | 温度上昇許容電流 <sup>(3)</sup>                                         |
|------------------|--------------------------------|---------------|-----------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| TOKO Part Number | Inductance <sup>(1)</sup> (μH) | Tolerance (%) | DC Resistance <sup>(2)</sup> (mΩ) Max. (Typ.) | Inductance Decrease Current <sup>(3)</sup> (A) Max. (Typ.)<br>$\frac{\Delta L}{L} = 30\%$ | Temperature Rise Current <sup>(3)</sup> ΔT=40°C (A) Max. (Typ.) |
| 1235AS-H-1R2N    | 1.2                            | ±30           | 47 (39)                                       | 3.50 (4.70)                                                                               | 2.90 (3.40)                                                     |
| 1235AS-H-1R8N    | 1.8                            | ±30           | 56 (47)                                       | 3.00 (3.90)                                                                               | 2.70 (3.20)                                                     |
| 1235AS-H-2R4M    | 2.4                            | ±20           | 65 (54)                                       | 2.60 (3.40)                                                                               | 2.30 (2.70)                                                     |
| 1235AS-H-3R3M    | 3.3                            | ±20           | 74 (62)                                       | 2.30 (3.00)                                                                               | 2.10 (2.50)                                                     |
| 1235AS-H-4R3M    | 4.3                            | ±20           | 84 (70)                                       | 2.00 (2.65)                                                                               | 2.00 (2.40)                                                     |
| 1235AS-H-6R8M    | 6.8                            | ±20           | 106 (88)                                      | 1.70 (2.20)                                                                               | 1.90 (2.20)                                                     |
| 1235AS-H-100M    | 10.0                           | ±20           | 144 (120)                                     | 1.30 (1.75)                                                                               | 1.70 (2.00)                                                     |
| 1235AS-H-220M    | 22.0                           | ±20           | 306 (255)                                     | 0.91 (1.20)                                                                               | 1.00 (1.20)                                                     |

(1) Inductance is measured with a LCR meter 4284A\* 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)

\* Agilent Technologies

(1) インダクタンスはLCRメータ4284A\* または同等品により測定する。測定周波数は100kHz。

(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、直流重量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。  
(周囲温度20°Cを基準とする。)

\* Agilent Technologies