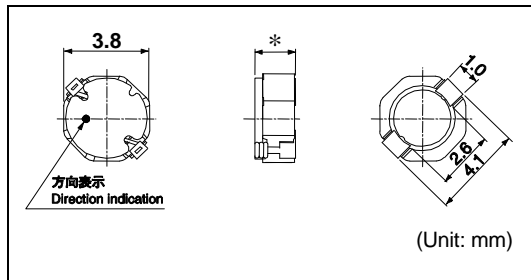
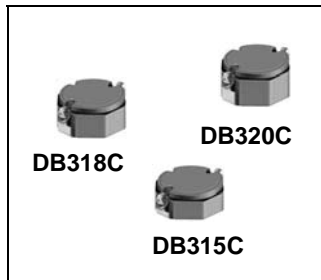


# DB315C/DB318C/DB320C

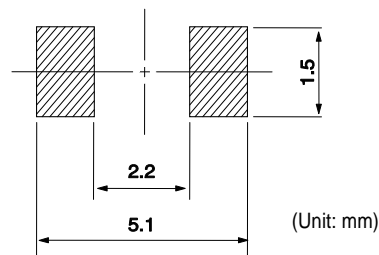
Inductance Range: 1.0~22μH (DB315C), 1.0~22μH (DB318C), 3.9~27μH (DB320C)

## DIMENSIONS / 外形寸法図



\* DB315C: 1.5mm Max. height  
 DB318C: 1.8mm Max. height  
 DB320C: 2.0mm Max. height

## Recommended patterns 推奨パターン図



## FEATURES / 特長

- Low profile (4.0mm Max. square, 1.5/1.8/2.0mm Max. height).
- Magnetically shielded construction and low DC resistance.
- Ideal for DC-DC converter choke coil for portable equipments (DVD, DSC, Cellular phone, PDA).
- RoHS compliant.
- 小型薄形構造(4.0mm角Max. 高さ1.5/1.8/2.0mmMax.)
- 閉磁路構造、低直流抵抗
- 小型機器 ( DVD, DSC, Cellular phone, PDA ) などのDC-DCコンバータ用チョークコイルに最適
- RoHS指令対応

## SELECTION GUIDE FOR STANDARD COILS

### TYPE DB315C ( 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>	直流電流許容電流 <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.)		Temperature Rise Current <sup>(3)</sup> ΔT=40°C (A) Max. (Typ.)
				$\frac{\Delta L}{L} = 10\%$	$\frac{\Delta L}{L} = 30\%$	
A1109AS-H-1R0N	1.0	±30	51 (43)	2.00 (2.70)	2.60 (3.50)	2.10 (2.50)
A1109AS-H-1R6N	1.6	±30	68 (57)	1.60 (2.10)	2.00 (2.70)	1.70 (2.00)
A1109AS-H-2R2N	2.2	±30	78 (65)	1.40 (1.90)	1.80 (2.40)	1.60 (1.90)
A1109AS-H-3R3M	3.3	±20	110 (88)	1.10 (1.50)	1.40 (1.90)	1.40 (1.60)
A1109AS-H-4R7M	4.7	±20	150 (120)	0.92 (1.20)	1.20 (1.60)	1.10 (1.30)
A1109AS-H-6R8M	6.8	±20	210 (180)	0.72 (0.97)	0.96 (1.30)	0.93 (1.10)
A1109AS-H-8R2M	8.2	±20	290 (240)	0.67 (0.89)	0.87 (1.20)	0.77 (0.91)
A1109AS-H-100M	10.0	±20	310 (260)	0.62 (0.83)	0.81 (1.10)	0.74 (0.87)
A1109AS-H-120M	12.0	±20	420 (350)	0.55 (0.73)	0.72 (0.96)	0.62 (0.72)
A1109AS-H-150M	15.0	±20	560 (470)	0.51 (0.68)	0.66 (0.88)	0.52 (0.62)
A1109AS-H-180M	18.0	±20	640 (530)	0.47 (0.62)	0.60 (0.81)	0.49 (0.58)
A1109AS-H-220M	22.0	±20	720 (600)	0.41 (0.55)	0.54 (0.73)	0.45 (0.53)

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**SELECTION GUIDE FOR STANDARD COILS**
**TYPE DB318C (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> (μH)	Tolerance (%)	DC Resistance <sup>(2)</sup> (mΩ) Max. (Typ.)	Inductance Decrease Current <sup>(3)</sup> (A) Max. (Typ.)		Temperature Rise Current <sup>(3)</sup> ΔT=40°C (A) Max. (Typ.)
				$\frac{\Delta L}{L} = 10\%$	$\frac{\Delta L}{L} = 30\%$	
A997AS-1R0N	1.0	± 30	40 (32)	1.80 (2.40)	2.30 (3.10)	2.40 (2.80)
A997AS-2R2N	2.2	± 30	60 (48)	1.30 (1.70)	1.60 (2.10)	1.90 (2.20)
A997AS-3R3M	3.3	± 20	70 (60)	0.94 (1.26)	1.20 (1.61)	1.64 (1.93)
A997AS-3R9M	3.9	± 20	90 (80)	0.86 (1.15)	1.10 (1.46)	1.37 (1.61)
A997AS-4R7M	4.7	± 20	100 (90)	0.85 (1.14)	1.07 (1.43)	1.29 (1.52)
A997AS-5R6M	5.6	± 20	120 (100)	0.81 (1.09)	1.02 (1.36)	1.23 (1.45)
A997AS-6R8M	6.8	± 20	130 (110)	0.69 (0.92)	0.89 (1.19)	1.10 (1.29)
A997AS-8R2M	8.2	± 20	160 (140)	0.59 (0.78)	0.75 (1.00)	1.05 (1.23)
A997AS-100M	10.0	± 20	180 (150)	0.58 (0.77)	0.74 (0.99)	0.99 (1.16)
A997AS-120M	12.0	± 20	230 (190)	0.55 (0.73)	0.70 (0.94)	0.78 (0.92)
A997AS-150M	15.0	± 20	260 (210)	0.48 (0.64)	0.61 (0.81)	0.74 (0.87)
A997AS-180M	18.0	± 20	330 (270)	0.42 (0.56)	0.53 (0.70)	0.63 (0.74)
A997AS-220M	22.0	± 20	440 (370)	0.39 (0.52)	0.51 (0.67)	0.53 (0.63)

**TYPE DB320C (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> (μH)	Tolerance (%)	DC Resistance <sup>(2)</sup> (mΩ) Max. (Typ.)	Inductance Decrease Current <sup>(3)</sup> (A) Max. (Typ.)		Temperature Rise Current <sup>(3)</sup> ΔT=40°C (A) Max. (Typ.)
				$\frac{\Delta L}{L} = 10\%$	$\frac{\Delta L}{L} = 30\%$	
A993AS-3R9M	3.9	± 20	80 (70)	0.86 (1.15)	1.10 (1.47)	1.38 (1.73)
A993AS-4R7M	4.7	± 20	100 (80)	0.85 (1.14)	1.08 (1.44)	1.28 (1.60)
A993AS-5R6M	5.6	± 20	110 (90)	0.73 (0.97)	0.97 (1.29)	1.21 (1.52)
A993AS-6R8M	6.8	± 20	120 (100)	0.70 (0.93)	0.89 (1.18)	1.19 (1.49)
A993AS-8R2M	8.2	± 20	140 (120)	0.66 (0.88)	0.85 (1.14)	0.97 (1.21)
A993AS-100M	10.0	± 20	160 (130)	0.59 (0.78)	0.74 (0.99)	0.96 (1.20)
A993AS-120M	12.0	± 20	190 (160)	0.56 (0.74)	0.69 (0.92)	0.83 (1.04)
A993AS-150M	15.0	± 20	240 (200)	0.49 (0.65)	0.62 (0.82)	0.74 (0.93)
A993AS-180M	18.0	± 20	290 (240)	0.45 (0.60)	0.56 (0.74)	0.65 (0.82)
A993AS-220M	22.0	± 20	370 (310)	0.41 (0.55)	0.52 (0.69)	0.55 (0.69)
A993AS-270M	27.0	± 20	480 (400)	0.35 (0.47)	0.45 (0.60)	0.47 (0.59)

- (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, 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。  
 (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、またはコイルの温度が40℃上昇する直流電流値の何れかの内、小さい値とする。  
 (周囲温度20℃を基準とする)