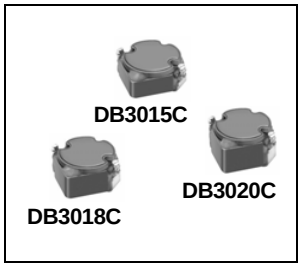
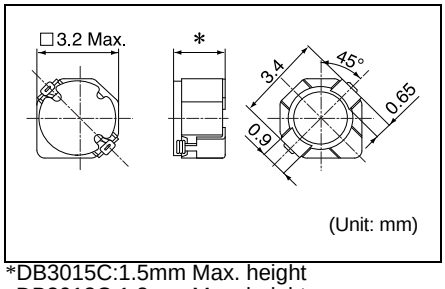
DB3015C/DB3018C/DB3020C

Inductance Range: 1.0~22µH (DB3015C),1.0~27µH (DB3018C),1.0~39µH (DB3020C)

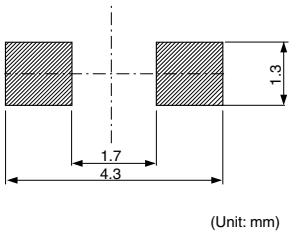
DIMENSIONS／外形寸法図





*DB3015C:1.5mm Max. height
DB3018C:1.8mm Max. height
DB3020C:2.0mm Max. height

Recommended patterns
推奨パターン図



FEATURES／特長

- Low profile (3.2mm Max. square,1.5/1.8/2.0mm Max. height).
- Magnetically shielded construction
- High current type and Low DC resistance type are released.
- Ideal for a variety of DC-DC converter inductor applications.
- RoHS compliant.

- **小型薄形構造**(3.2mm**角**Max. **高さ**1.5/1.8/2.0mmMax.)
- **閉磁路構造**
- **高電流タイプと低直流抵抗タイプとを品揃え**
- **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 DB3015C (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.) ΔL/L =30%	Temperature Rise Current(3) ΔT=40°C (A) Max. (Typ.)
1068AS-1R0N	1.0	± 30	43 (36)	2.00 (2.70)	2.10 (2.50)
1068AS-1R2N	1.2	± 30	58 (48)	1.70 (2.30)	1.70 (2.00)
1068AS-1R6N	1.6	± 30	72 (60)	1.50 (2.00)	1.50 (1.75)
1068AS-2R0N	2.0	± 30	95 (79)	1.30 (1.80)	1.30 (1.50)
1068AS-2R4N	2.4	± 30	105 (87)	1.20 (1.60)	1.20 (1.40)
1068AS-3R0N	3.0	± 30	122 (102)	1.10 (1.50)	1.10 (1.30)
1068AS-3R6N	3.6	± 30	145 (122)	1.00 (1.40)	0.96 (1.10)
1068AS-3R9N	3.9	± 30	155 (130)	0.96 (1.30)	0.90 (1.00)
1068AS-4R7N	4.7	± 30	200 (165)	0.89 (1.20)	0.80 (0.93)
1068AS-5R6N	5.6	± 30	215 (180)	0.82 (1.10)	0.76 (0.90)
1068AS-6R8N	6.8	± 30	310 (255)	0.71 (0.95)	0.62 (0.71)
1068AS-8R2N	8.2	± 30	320 (265)	0.68 (0.90)	0.60 (0.69)
1068AS-100M	10.0	± 20	385 (320)	0.60 (0.80)	0.57 (0.67)
1068AS-120M	12.0	± 20	475 (395)	0.55 (0.73)	0.47 (0.55)

TYPE DB3015C (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.) ΔL/L =30%	Temperature Rise Current(3) ΔT=40°C (A) Max. (Typ.)
1068BS-1R0N	1.0	± 30	40 (33)	1.35 (1.80)	2.10 (2.50)
1068BS-1R2N	1.2	± 30	47 (39)	1.20 (1.60)	1.90 (2.30)
1068BS-1R6N	1.6	± 30	60 (50)	1.00 (1.40)	1.70 (2.00)
1068BS-2R0N	2.0	± 30	72 (60)	0.93 (1.20)	1.50 (1.70)
1068BS-2R4N	2.4	± 30	84 (68)	0.83 (1.10)	1.40 (1.60)
1068BS-3R0N	3.0	± 30	102 (85)	0.76 (1.00)	1.20 (1.40)
1068BS-3R6N	3.6	± 30	115 (95)	0.70 (0.95)	1.10 (1.30)
1068BS-4R3N	4.3	± 30	140 (115)	0.65 (0.87)	1.00 (1.20)
1068BS-4R7N	4.7	± 30	155 (130)	0.60 (0.80)	0.90 (1.10)
1068BS-5R6N	5.6	± 30	165 (135)	0.56 (0.75)	0.85 (1.00)
1068BS-6R8N	6.8	± 30	200 (165)	0.51 (0.67)	0.80 (0.96)
1068BS-8R2N	8.2	± 30	245 (205)	0.45 (0.60)	0.70 (0.83)
1068BS-100M	10.0	± 20	285 (235)	0.41 (0.55)	0.63 (0.75)
1068BS-120M	12.0	± 20	370 (310)	0.36 (0.50)	0.55 (0.65)
1068BS-150M	15.0	± 20	480 (400)	0.33 (0.45)	0.43 (0.51)
1068BS-180M	18.0	± 20	550 (460)	0.30 (0.40)	0.41 (0.49)
1068BS-220M	22.0	± 20	635 (530)	0.27 (0.37)	0.36 (0.43)

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SELECTION GUIDE FOR STANDARD COILS

TYPE DB3018C (High current Type 大電流タイプ, Quantity / reel; 2,000 PCS)

東光品番 TOKO Part Number	インダクタンス(1) Inductance(1) (µH)	許容差 Tolerance (%)	直流抵抗(2) DC Resistance(2) (mΩ) Max. (Typ.)	直流重畳許容電流(3) Inductance Decrease Current(3) (A) Max. (Typ.) ΔL/L =30%	温度上昇許容電流(3) Temperature Rise Current(3) ΔT=40°C (A) Max. (Typ.)
1069AS-1R0N	1.0	± 30	45 (37)	2.10 (2.80)	2.04 (2.40)
1069AS-1R2N	1.2	± 30	50 (41)	1.80 (2.40)	1.87 (2.20)
1069AS-1R5N	1.5	± 30	56 (47)	1.65 (2.10)	1.69 (2.00)
1069AS-2R0N	2.0	± 30	72 (60)	1.44 (1.90)	1.45 (1.70)
1069AS-2R4N	2.4	± 30	80 (66)	1.31 (1.70)	1.35 (1.60)
1069AS-2R7N	2.7	± 30	96 (80)	1.18 (1.60)	1.20 (1.40)
1069AS-3R3N	3.3	± 30	110 (92)	1.11 (1.50)	1.03 (1.30)
1069AS-3R9N	3.9	± 30	115 (95)	1.01 (1.40)	1.02 (1.20)
1069AS-4R3N	4.3	± 30	126 (105)	0.97 (1.30)	1.01 (1.10)
1069AS-5R6N	5.6	± 30	170 (140)	0.82 (1.10)	0.89 (1.00)
1069AS-6R8N	6.8	± 30	205 (170)	0.78 (1.00)	0.76 (0.90)
1069AS-8R2N	8.2	± 30	265 (220)	0.68 (0.90)	0.68 (0.80)
1069AS-100M	10.0	± 20	290 (240)	0.63 (0.85)	0.62 (0.73)
1069AS-120M	12.0	± 20	400 (330)	0.56 (0.75)	0.51 (0.60)
1069AS-150M	15.0	± 20	545 (455)	0.50 (0.67)	0.44 (0.52)
1069AS-180M	18.0	± 20	615 (510)	0.45 (0.60)	0.41 (0.49)
1069AS-220M	22.0	± 20	680 (565)	0.42 (0.56)	0.40 (0.47)

TYPE DB3018C (Low DC resistance Type 低直流抵抗タイプQuantity / reel; 2,000 PCS)

東光品番 TOKO Part Number	インダクタンス(1) Inductance(1) (µH)	許容差 Tolerance (%)	直流抵抗(2) DC Resistance(2) (mΩ) Max. (Typ.)	直流重畳許容電流(3) Inductance Decrease Current(3) (A) Max. (Typ.) ΔL/L =30%	温度上昇許容電流(3) Temperature Rise Current(3) ΔT=40°C (A) Max. (Typ.)
1069BS-1R0N	1.0	± 30	40 (33)	1.43 (1.90)	2.18 (2.60)
1069BS-1R2N	1.2	± 30	45 (37)	1.24 (1.70)	1.98 (2.30)
1069BS-1R5N	1.5	± 30	50 (42)	1.11 (1.50)	1.82 (2.10)
1069BS-2R0N	2.0	± 30	55 (46)	0.99 (1.30)	1.65 (2.00)
1069BS-2R4N	2.4	± 30	63 (52)	0.91 (1.20)	1.58 (1.90)
1069BS-2R7N	2.7	± 30	70 (58)	0.80 (1.10)	1.52 (1.80)
1069BS-3R3N	3.3	± 30	78 (65)	0.79 (1.00)	1.40 (1.60)
1069BS-3R9N	3.9	± 30	95 (78)	0.69 (0.93)	1.26 (1.50)
1069BS-4R7N	4.7	± 30	110 (90)	0.64 (0.86)	1.12 (1.30)
1069BS-5R6N	5.6	± 30	125 (105)	0.55 (0.74)	1.02 (1.20)
1069BS-6R8N	6.8	± 30	170 (140)	0.54 (0.72)	0.79 (0.95)
1069BS-8R2N	8.2	± 30	185 (155)	0.45 (0.61)	0.78 (0.92)
1069BS-100M	10.0	± 20	210 (175)	0.44 (0.59)	0.75 (0.89)
1069BS-120M	12.0	± 20	260 (215)	0.38 (0.51)	0.65 (0.77)
1069BS-150M	15.0	± 20	345 (285)	0.33 (0.45)	0.58 (0.70)
1069BS-180M	18.0	± 20	450 (375)	0.31 (0.42)	0.54 (0.65)
1069BS-220M	22.0	± 20	495 (415)	0.29 (0.40)	0.44 (0.60)
1069BS-270M	27.0	± 20	685 (570)	0.24 (0.33)	0.38 (0.45)

(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, 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。)
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SELECTION GUIDE FOR STANDARD COILS

TYPE DB3020C (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.) $\frac{\Delta L}{L}$ =30%	Temperature Rise Current(3) ΔT=40°C (A) Max. (Typ.)
1070AS-1R0N	1.0	± 30	47 (39)	2.10 (2.70)	1.90 (2.20)
1070AS-1R2N	1.2	± 30	52 (43)	1.80 (2.40)	1.80 (2.10)
1070AS-1R5N	1.5	± 30	58 (48)	1.60 (2.10)	1.70 (2.00)
1070AS-2R0N	2.0	± 30	62 (52)	1.40 (1.90)	1.60 (1.90)
1070AS-2R4N	2.4	± 30	70 (58)	1.30 (1.70)	1.50 (1.70)
1070AS-3R0N	3.0	± 30	77 (64)	1.20 (1.50)	1.40 (1.60)
1070AS-3R3N	3.3	± 30	85 (70)	1.10 (1.40)	1.30 (1.50)
1070AS-3R9N	3.9	± 30	96 (80)	1.00 (1.30)	1.20 (1.40)
1070AS-4R7N	4.7	± 30	120 (100)	0.90 (1.20)	1.05 (1.20)
1070AS-5R6N	5.6	± 30	150 (125)	0.83 (1.10)	0.95 (1.10)
1070AS-6R8N	6.8	± 30	175 (145)	0.76 (1.00)	0.86 (1.00)
1070AS-8R2N	8.2	± 30	195 (160)	0.67 (0.90)	0.83 (0.95)
1070AS-100M	10.0	± 20	205 (170)	0.64 (0.85)	0.77 (0.90)
1070AS-120M	12.0	± 20	270 (225)	0.56 (0.75)	0.66 (0.77)
1070AS-150M	15.0	± 20	360 (300)	0.49 (0.65)	0.58 (0.68)
1070AS-180M	18.0	± 20	480 (400)	0.44 (0.60)	0.48 (0.56)
1070AS-220M	22.0	± 20	640 (535)	0.41 (0.54)	0.41 (0.48)
1070AS-270M	27.0	± 20	730 (610)	0.36 (0.48)	0.37 (0.42)

TYPE DB3020C (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.) $\frac{\Delta L}{L}$ =30%	Temperature Rise Current(3) ΔT=40°C (A) Max. (Typ.)
1070BS-1R0N	1.0	± 30	41 (34)	1.40 (1.90)	2.10 (2.40)
1070BS-1R2N	1.2	± 30	47 (39)	1.30 (1.70)	1.90 (2.20)
1070BS-1R5N	1.5	± 30	52 (43)	1.10 (1.50)	1.80 (2.10)
1070BS-2R0N	2.0	± 30	58 (48)	0.97 (1.30)	1.70 (2.00)
1070BS-2R4N	2.4	± 30	62 (52)	0.90 (1.20)	1.60 (1.90)
1070BS-3R0N	3.0	± 30	70 (58)	0.80 (1.05)	1.50 (1.80)
1070BS-3R3N	3.3	± 30	74 (62)	0.73 (0.97)	1.45 (1.70)
1070BS-3R9N	3.9	± 30	77 (64)	0.69 (0.90)	1.40 (1.60)
1070BS-4R3N	4.3	± 30	90 (75)	0.63 (0.85)	1.30 (1.50)
1070BS-5R6N	5.6	± 30	110 (90)	0.56 (0.75)	1.20 (1.40)
1070BS-6R2N	6.2	± 30	120 (100)	0.53 (0.70)	1.10 (1.30)
1070BS-8R2N	8.2	± 30	155 (130)	0.46 (0.61)	0.90 (1.10)
1070BS-100M	10.0	± 20	200 (165)	0.41 (0.55)	0.80 (0.91)
1070BS-120M	12.0	± 20	245 (205)	0.37 (0.48)	0.73 (0.86)
1070BS-150M	15.0	± 20	270 (225)	0.34 (0.45)	0.70 (0.83)
1070BS-180M	18.0	± 20	305 (255)	0.31 (0.41)	0.63 (0.74)
1070BS-220M	22.0	± 20	350 (290)	0.27 (0.37)	0.57 (0.67)
1070BS-270M	27.0	± 20	445 (370)	0.25 (0.34)	0.50 (0.59)
1070BS-330M	33.0	± 20	610 (510)	0.23 (0.30)	0.39 (0.46)
1070BS-390M	39.0	± 20	800 (670)	0.21 (0.28)	0.33 (0.40)

(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, 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℃上昇の何れか小さい値です。(周囲温度20℃を基準とする。)
* Agilent Technologies