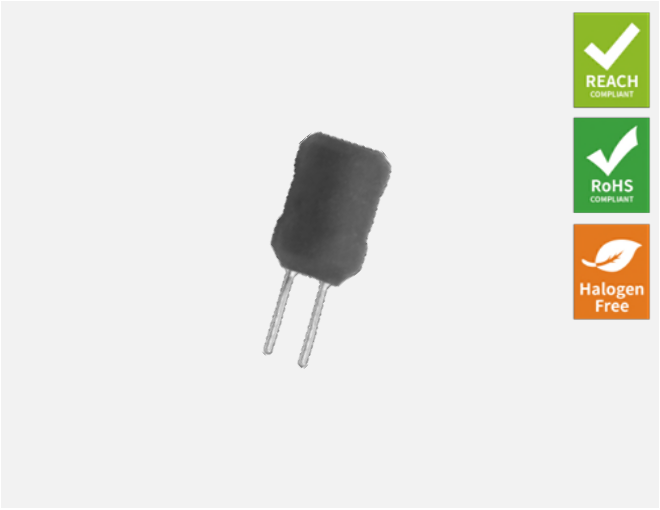
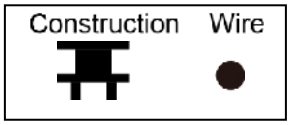
ANHUI-TIGER
Passive Components

Drum Dip Inductor
TGKH1016 Series





Outline:

- Small footprint power inductors designed for maximum efficiency And low cost
- Industry-standard pin spacings; protective PVC sleeve
- In addition to the standard versions of inductors shown here custom inductors are available to meet your exact requirements

Features:

- Core material:Ferrite
- Enviromental: RoHS, Reach compliant ,Halogen free
- Weight:6.12g
- Moisture Sensitivity:Level (MSL) 1 (unlimited floor life at <30° C /85% relative humidity).
- Operating temperature range: -40℃～+125℃ (including coil's self temperature rise)
- Storage temperature range: -40℃～+125℃

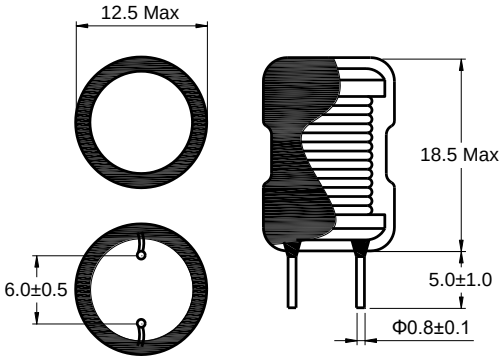
Application:

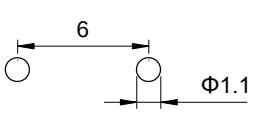
- Ideal for noise filtering in power amplifiers,power supplies and Speaker crossoner networks.
- buck converter,network communication equipment, and etc

1 Electrical Characteristics

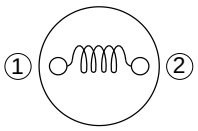
Part No.	Inductance (μH)※1	D.C.R. (mΩ)		Isat (A)※2	Irms (A) ※3
		Typical	Max	Typical	Typical
TGKH1016-100K	10.0	21.7	26.1	12.9	5.87
TGKH1016-120K	12.0	25.0	30.0	11.8	5.30
TGKH1016-150K	15.0	27.8	33.3	10.0	4.94
TGKH1016-180K	18.0	30.9	37.1	9.60	4.75
TGKH1016-220K	22.0	33.7	40.5	8.40	4.46
TGKH1016-270K	27.0	38.2	45.9	7.80	4.29
TGKH1016-330K	33.0	40.9	49.1	7.00	4.09
TGKH1016-390K	39.0	45.9	55.0	6.30	3.90
TGKH1016-470K	47.0	51.3	61.6	5.90	3.70
TGKH1016-560K	56.0	66.2	79.5	5.60	3.30
TGKH1016-680K	68.0	74.3	89.2	4.90	3.10
TGKH1016-820K	82.0	82.5	99.0	4.50	2.90
TGKH1016-101K	100	108	130	4.00	2.55
TGKH1016-121K	120	143	172	3.50	2.23
TGKH1016-151K	150	165	198	3.30	2.06
TGKH1016-181K	180	181	218	2.90	1.95
TGKH1016-221K	220	246	295	2.60	1.69
TGKH1016-271K	270	283	340	2.40	1.58
TGKH1016-331K	330	353	423	2.20	1.40
TGKH1016-391K	390	396	475	2.00	1.33
TGKH1016-471K	470	478	573	1.80	1.21
TGKH1016-561K	560	533	640	1.70	1.13
TGKH1016-681K	680	693	832	1.55	1.02
TGKH1016-821K	820	862	1,035	1.45	0.91
TGKH1016-102K	1,000	983	1,179	1.35	0.82

2 Product Dimensions (mm)





Typical Hole Pattern



Schematic

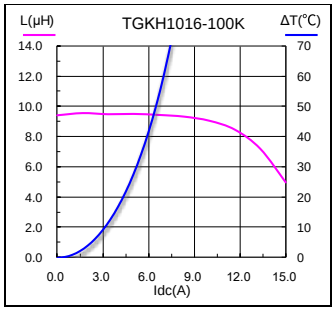
All data is tested on 25℃ ambient temperature

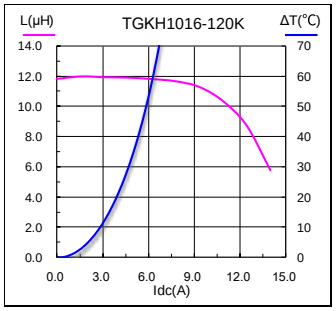
1.Inductance measure condition at 1kHz,0.25V

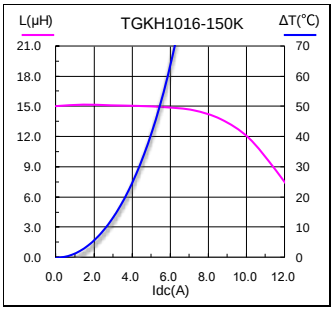
2.Isat:the actual value of DC current when the Inductance decrease 20% of its initial value

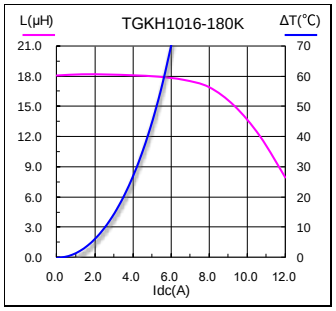
3. Irms:the actual value of DC current when the the temperature rise is ΔT40℃(Ta=25℃)

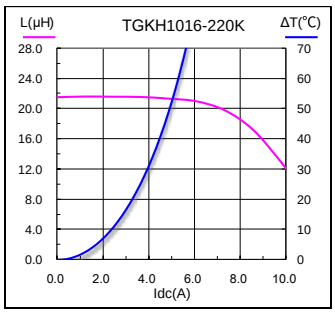
3 Saturation Current vs Temperature Rise Current Curve

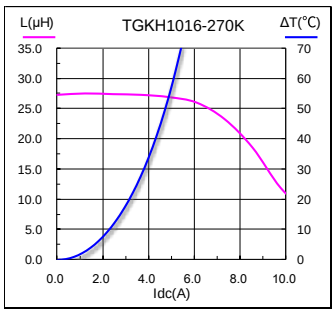


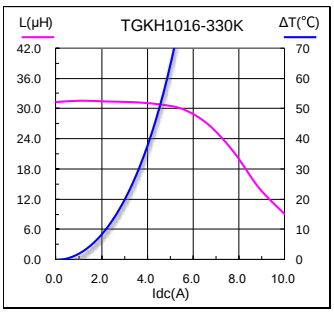


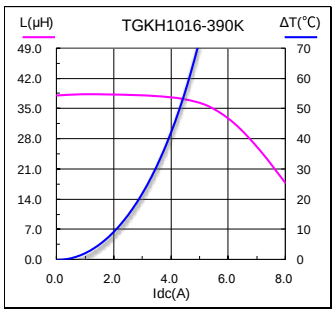


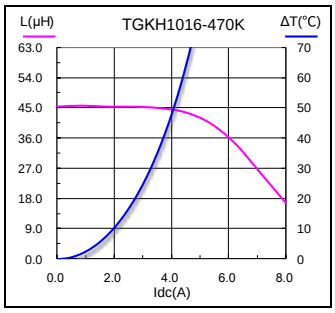


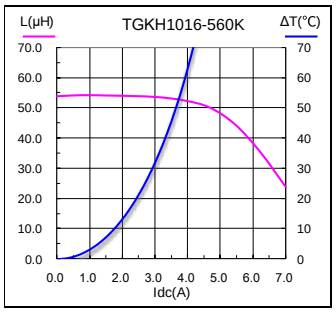


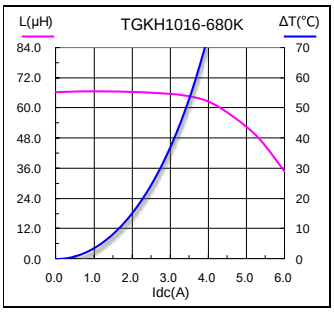


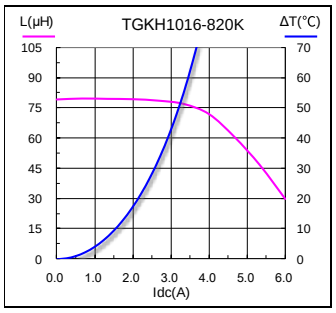


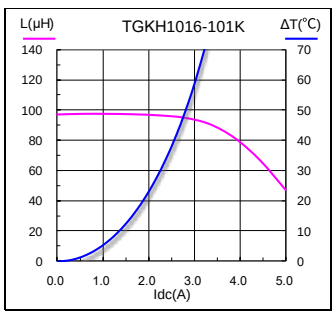


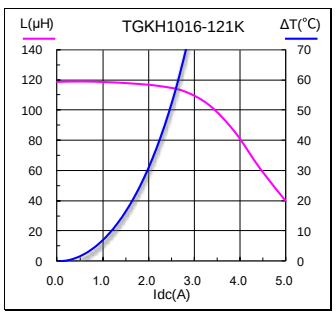


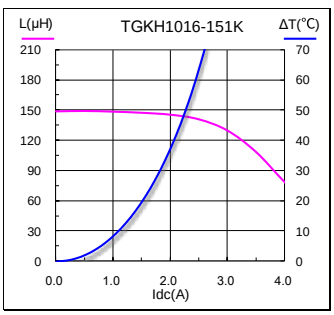


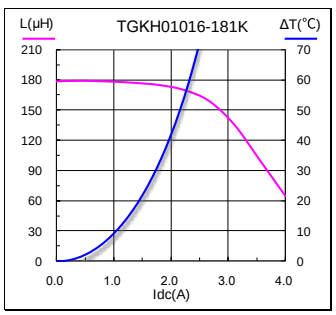


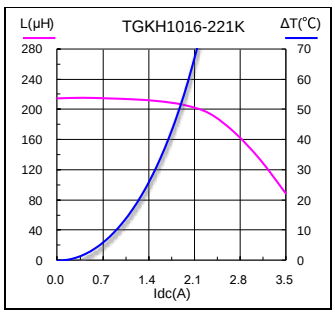


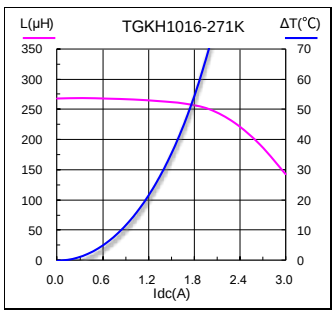


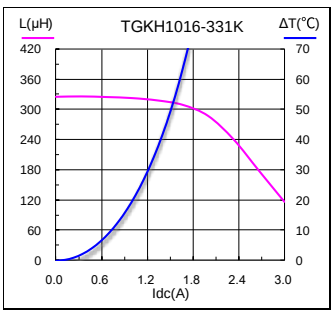


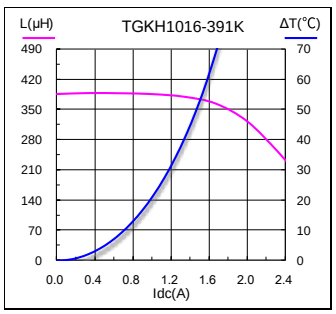


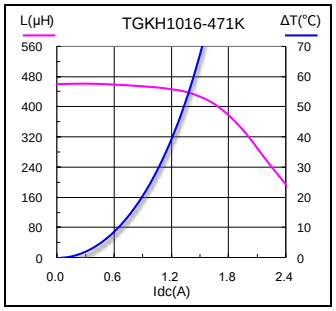


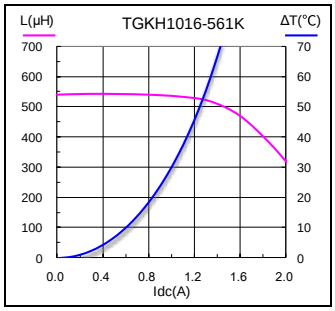


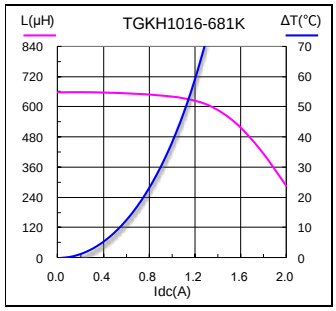


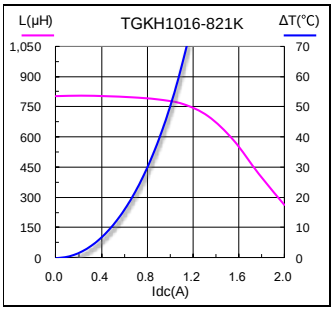


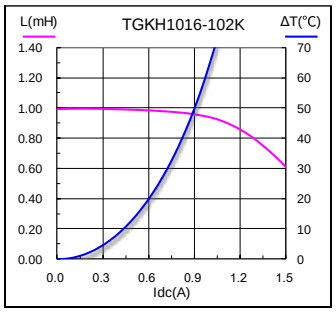



L(μH)
TGKH1016-471K
ΔT(℃)
560
480
400
320
240
160
80
0
70
60
50
40
30
20
10
0
0.0
0.6
1.2
1.8
2.4
Idc(A)


L(μH)
TGKH1016-561K
ΔT(℃)
700
600
500
400
300
200
100
0
70
60
50
40
30
20
10
0
0.0
0.4
0.8
1.2
1.6
2.0
Idc(A)

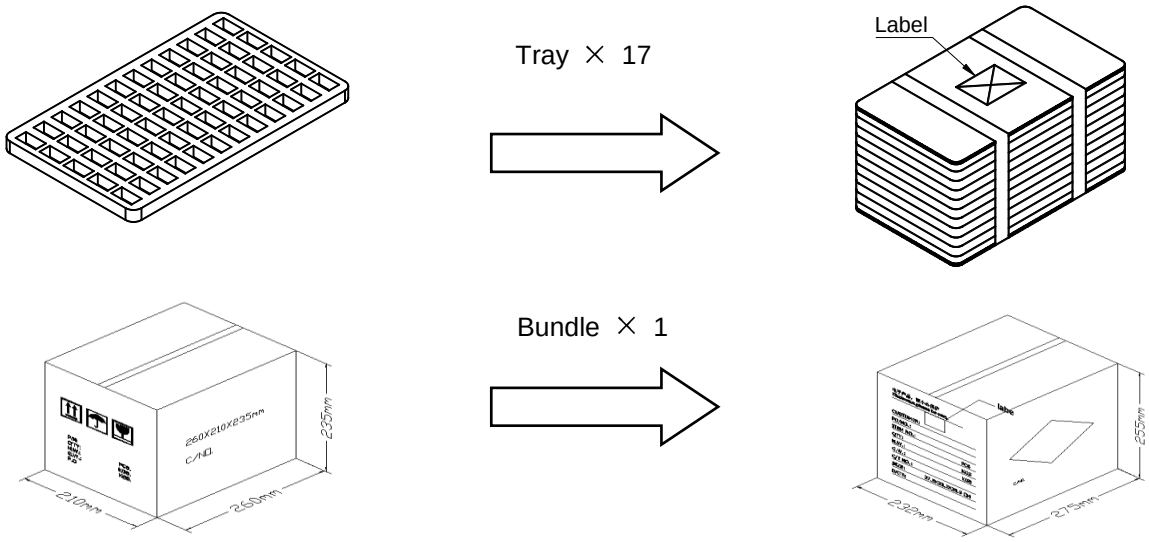

L(μH)
TGKH1016-681K
ΔT(℃)
840
720
600
480
360
240
120
0
70
60
50
40
30
20
10
0
0.0
0.4
0.8
1.2
1.6
2.0
Idc(A)


L(μH)
TGKH1016-821K
ΔT(℃)
1,050
900
750
600
450
300
150
0
70
60
50
40
30
20
10
0
0.0
0.4
0.8
1.2
1.6
2.0
Idc(A)


L(mH)
TGKH1016-102K
ΔT(℃)
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
70
60
50
40
30
20
10
0
0.0
0.3
0.6
0.9
1.2
1.5
Idc(A)

4 Packing Specification

4.1 Packing(mm)



4.2 Carton Dimensions and Packing Quantity

■ Inner Carton：260×210×235mm ■ Out Carton ：275×232×255mm

Product Series	Quantity / Tray	Inner Carton Quantity	Out Carton Quantity
TGKH1016	80pcs	(80×17) =1360pcs	(1360×1) =1360pcs

4.3 Label Making

The following items will be marked on the tray of product label and shipping label.

Production Label
■ Packing No.
■ Quantity
■Shipment Date
■ Part No.
■Customer Part No.
■ Customer Po No.

Shipping Label
■ Packing No.
■ Quantity
■Shipment Date
■ Part No.
■Customer Part No.
■ Customer Po No.

5 Notice of Use

5.1 Special remind:Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

5.2 Product in packing storage condition:temperature 5～40℃, RH≤70%.
If taking out for use, the remaining products should be sealed in plastic bags and preserved in accordance with the above conditions, to avoid oxidation of terminals (electrodes), affecting soldering status.

5.3 A storage of Codaca Electronic products for longer than 12 months is not recommended, Within other effects, the terminals may suffer degradation, resulting in bad solderability. Therefore, all products shall be used within the period of 12 months based on the day of shipment.

5.4 Do not keep products in unsuitable storage conditions, such as areas susceptible to high temperatures, high humidity, dust or corrosion.

5.5 Always handle products with care.

5.6 Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering. Always ensure optimum conditions for soldering.

5.7 When this product will be used on a similar or new project to the original one, sometimes it might be unable to satisfy the specifications due to different condition of usage.

5.8 This inductor itself does not have any protective function in abnormal condition, such as overload, short-circuit, open-circuit conditions, etc. Therefore, it shall be confirmed that there is no risk of smoke, fire, dielectric withstand voltage, insulation resistance, etc., or use in abnormal conditions protective devicesor protection circuit in the end product.

5.9 Hi-Pot test with higher voltage than spec value will damage insulating material and shorten its life.

5.10 If using in potting compound, the magnet wire coating might be damaged, please consult with us.

5.11 Refrain from rinsing coils. If necessary, please consult with us.