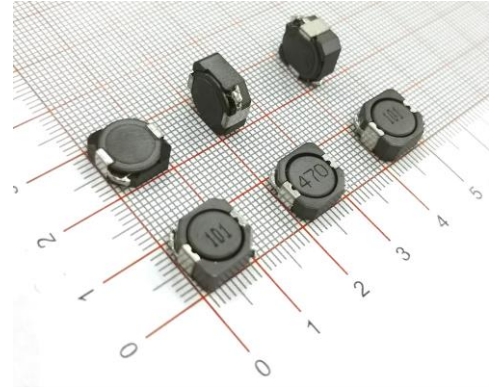
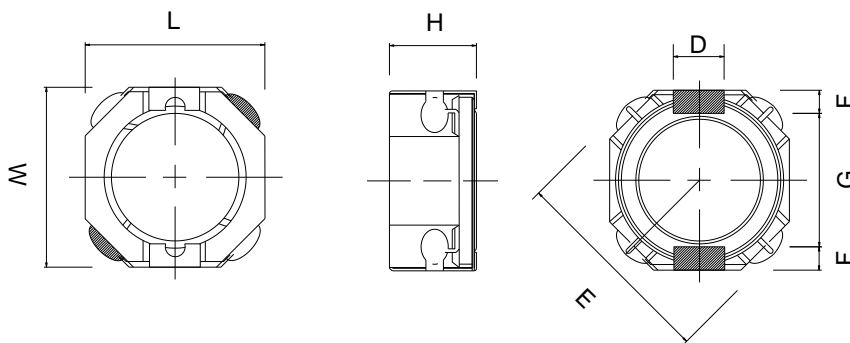


Product outline

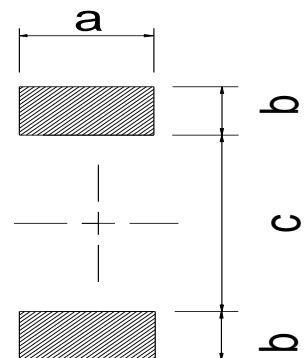
- Magnetically shielded types.
- A wide range of product line up is available to meet various requirements.
- Excellent saturation current handling to be up to 9.69A.
- For DC/DC converter applications.
- Ideally used in car navigation, LED Lighting, Notebook PC, power modules, etc.
- Custom design is also available.
- RoHS compliant.



Dimensions



Recommended land pattern



unit: mm

Type	L	W	H	D	E	F	G	a	b	c	Packaging (pcs/reel)
KTDRH103R	10.2	10.0	3.1 max.	3.0	13.3	1.2	7.8	3.2	1.6	7.3	1000
KTDRH104R	10.2	10.0	4.0 max.	3.0	13.3	1.2	7.8	3.2	1.6	7.3	1000
KTDRH105R	10.2	10.0	5.1 max.	3.0	13.3	1.2	7.8	3.2	1.6	7.3	800

Dimensions without tolerance are typical.

Product Identification

KTDRH 103 R - 470 N C S
 (1) (2) (3) (4) (5) (6) (7)

(1) Product Series No.

2) Dimension symbol.

103=10.2x10x3.1mm (L x W x H)

(3) Internal control code.

(4) Inductance value.

100=10x10⁰ uH=10 uH 2R2=2.2 uH

(5) Tolerance.

N=±30%, M=±20%, K=±10%

(6) Packing Style.

C=Carrier Tape, B=Bulk

(7) Characteristic parameter level.

KTDRH103R Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KTDRH103R-1R5NCS	1.5	±30%	18	7.00
KTDRH103R-2R2NCS	2.2	±30%	23	6.50
KTDRH103R-3R3NCS	3.3	±30%	28	6.00
KTDRH103R-4R7NCS	4.7	±30%	47	5.50
KTDRH103R-5R6NCS	5.6	±30%	55	4.80
KTDRH103R-6R8NCS	6.8	±30%	58	3.84
KTDRH103R-8R2NCS	8.2	±30%	72	4.50
KTDRH103R-100MCS	10	±20%	97	3.18
KTDRH103R-150MCS	15	±20%	122	2.80
KTDRH103R-220MCS	22	±20%	143	2.40
KTDRH103R-330MCS	33	±20%	230	2.20
KTDRH103R-470MCS	47	±20%	341	1.90
KTDRH103R-560MCS	56	±20%	371	1.70
KTDRH103R-680MCS	68	±20%	511	1.50
KTDRH103R-820MCS	82	±20%	541	1.30
KTDRH103R-101MCS	100	±20%	803	1.10
KTDRH103R-151MCS	150	±20%	1260	0.92
KTDRH103R-221MCS	220	±20%	1760	0.75

KTDRH 104R Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KTDRH104R-1R0NCS	1.0	±30%	14	10.00
KTDRH104R-1R5NCS	1.5	±30%	47	10.00
KTDRH104R-1R8NCS	1.8	±30%	17	10.00
KTDRH104R-2R0NCS	2.0	±30%	21	7.50
KTDRH104R-2R2NCS	2.2	±30%	21	7.50
KTDRH104R-2R5NCS	2.5	±30%	21	7.50
KTDRH104R-3R3NCS	3.3	±30%	25	6.00
KTDRH104R-3R5NCS	3.5	±30%	25	6.00
KTDRH104R-3R8NCS	3.8	±30%	25	6.00
KTDRH104R-4R7NCS	4.7	±30%	28	5.50
KTDRH104R-5R2NCS	5.2	±30%	22	5.50
KTDRH104R-5R6NCS	5.6	±30%	31	5.20
KTDRH104R-6R0NCS	6.0	±30%	35	5.00
KTDRH104R-6R8NCS	6.8	±30%	38	4.80
KTDRH104R-7R0NCS	7.0	±30%	38	4.80
KTDRH104R-8R2NCS	8.2	±30%	42	4.60
KTDRH104R-100MCS	10	±20%	43	4.40
KTDRH104R-120MCS	12	±20%	60	4.00
KTDRH104R-150MCS	15	±20%	68	3.60
KTDRH104R-180MCS	18	±20%	70	3.30
KTDRH104R-220MCS	22	±20%	90	2.90
KTDRH104R-240MCS	24	±20%	110	2.90
KTDRH104R-270MCS	27	±20%	117	2.60
KTDRH104R-330MCS	33	±20%	120	2.40
KTDRH104R-390MCS	39	±20%	150	2.20
KTDRH104R-470MCS	47	±20%	190	2.10
KTDRH104R-500MCS	50	±20%	200	2.00
KTDRH104R-560MCS	56	±20%	297	1.80
KTDRH104R-680MCS	68	±20%	350	1.50
KTDRH104R-750MCS	75	±20%	365	1.47
KTDRH104R-820MCS	82	±20%	385	1.45
KTDRH104R-101MCS	100	±20%	430	1.35
KTDRH104R-121MCS	120	±20%	470	1.25
KTDRH104R-151MCS	150	±20%	506	1.15
KTDRH104R-181MCS	180	±20%	627	1.00
KTDRH104R-221MCS	220	±20%	756	0.92
KTDRH104R-271MCS	270	±20%	950	0.75
KTDRH104R-331MCS	330	±20%	1090	0.70
KTDRH104R-471MCS	470	±20%	1900	0.60
KTDRH104R-681MCS	680	±20%	2200	0.55
KTDRH104R-751MCS	750	±20%	3120	0.47
KTDRH104R-821MCS	820	±20%	4600	0.40
KTDRH104R-102MCS	1000	±20%	5110	0.32

KTDRH 105R Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KTDRH105R-1R5NCS	1.5	±30%	11	10.50
KTDRH105R-2R2NCS	2.2	±30%	13	9.25
KTDRH105R-3R3NCS	3.3	±30%	17	7.80
KTDRH105R-4R7NCS	4.7	±30%	19	6.40
KTDRH105R-5R6NCS	5.6	±30%	22	5.90
KTDRH105R-6R8NCS	6.8	±30%	25	5.40
KTDRH105R-8R2NCS	8.2	±30%	29	4.85
KTDRH105R-100MCS	10	±20%	46	4.50
KTDRH105R-150MCS	15	±20%	49	3.60
KTDRH105R-220MCS	22	±20%	61	2.95
KTDRH105R-330MCS	33	±20%	84	2.40
KTDRH105R-470MCS	47	±20%	130	2.00
KTDRH105R-560MCS	56	±20%	149	1.90
KTDRH105R-680MCS	68	±20%	201	1.65
KTDRH105R-820MCS	82	±20%	227	1.50
KTDRH105R-101MCS	100	±20%	253	1.35
KTDRH105R-121MCS	120	±20%	303	1.28
KTDRH105R-151MCS	150	±20%	370	1.12
KTDRH105R-181MCS	180	±20%	419	1.04
KTDRH105R-221MCS	220	±20%	500	0.94
KTDRH105R-331MCS	330	±20%	700	0.80
KTDRH105R-391MCS	390	±20%	800	0.75
KTDRH105R-471MCS	470	±20%	1290	0.60
KTDRH105R-561MCS	560	±20%	1430	0.54
KTDRH105R-681MCS	680	±20%	1600	0.52
KTDRH105R-821MCS	820	±20%	1770	0.50
KTDRH105R-102MCS	1000	±20%	1990	0.48
KTDRH105R-152MCS	1500	±20%	3050	0.40
KTDRH105R-222MCS	2200	±20%	5110	0.30
KTDRH105R-332MCS	3300	±20%	6000	0.25
KTDRH105R-472MCS	4700	±20%	7500	0.20

① Inductance tested at 100kHz, 0.5 Vrms for Inductance $L < 100\mu\text{H}$, 1kHz, 0.5 Vrms for Inductance $L \geq 100\mu\text{H}$ using an Agilent/HP 4192A or equivalent.

② DCR measured on a micro-ohmmeter.

③ Rated current: the DC current at which the inductance decreases by 35% of its nominal value or at which $\Delta t=40^\circ\text{C}$, whichever is lower ($T_a=20^\circ\text{C}$).