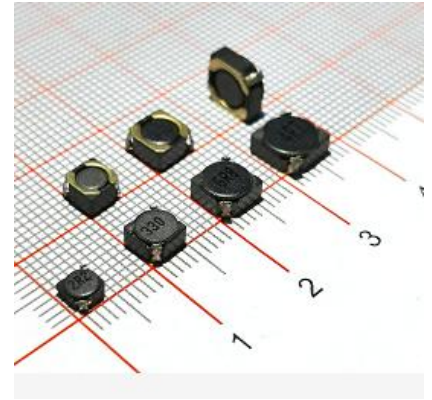
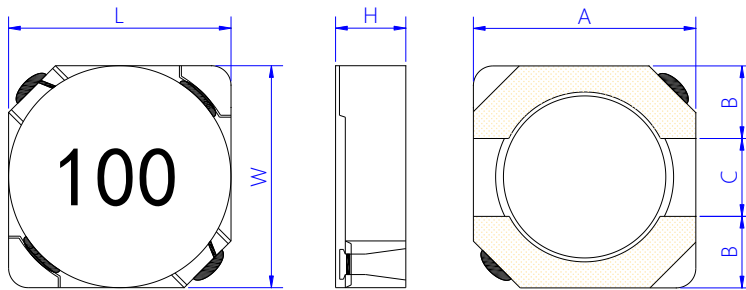


## Product outline

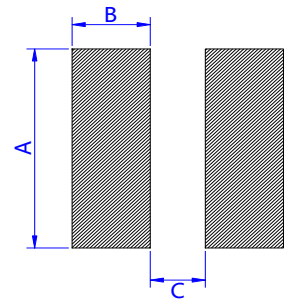
- Magnetically shielded types.
- A wide range of product line up is available to meet various requirements.
- Excellent saturation current handling to be up to 3.57A.
- For DC/DC converter applications.
- Ideally used in car navigation, LED Lighting, Notebook PC, power modules, etc.
- Custom design is also available.
- RoHS compliant.



## Dimensions



Recommended land pattern



Unit: mm

Type	A	B	C	E	F	G	H	I	J	Packaging (pcs/reel)
KT4D28S	4.70±0.3	4.70±0.3	2.80±0.2	4.7 typ.	1.6 typ.	1.5 typ.	5.3 typ.	1.9 typ.	1.5 typ.	2000
KT5D18S	5.70±0.3	5.70±0.3	1.80±0.2	5.7 typ.	1.85 typ.	2.0 typ.	6.3 typ.	2.15 typ.	2.0 typ.	3000
KT5D28S	5.70±0.3	5.70±0.3	2.80±0.2	5.7 typ.	1.85 typ.	2.0 typ.	6.3 typ.	2.15 typ.	2.0 typ.	2000
KT6D28S	6.70±0.3	6.70±0.3	2.80±0.2	6.7 typ.	2.35 typ.	2.0 typ.	7.3 typ.	2.65 typ.	2.0 typ.	1500
KT6D38S	6.70±0.3	6.70±0.3	3.80±0.2	6.7 typ.	2.35 typ.	2.0 typ.	7.3 typ.	2.65 typ.	2.0 typ.	1000

Dimensions without tolerance are typical.

## Product Identification

KT   4D28   S   -   470   M   C   S  
 (1)   (2)   (3)   (4)   (5)   (6)   (7)

(1) Product Series No.

(2) Dimension symbol.

4D28=4.7x4.7x2.8mm (L x W x H)

(3) Internal control code.

(4) Inductance value.

100=10×10<sup>0</sup> 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.

**KT4D28S Electrical Characteristics**

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current max. (A) ③
KT4D28S-1R2NCS	1.2	±30%	23.1	2.61
KT4D28S-1R8NCS	1.8	±30%	27.0	2.24
KT4D28S-2R2NCS	2.2	±30%	30.7	2.08
KT4D28S-2R7NCS	2.7	±30%	42.4	1.63
KT4D28S-3R3NCS	3.3	±30%	48.2	1.60
KT4D28S-3R9NCS	3.9	±30%	63.5	1.47
KT4D28S-4R7NCS	4.7	±30%	70.6	1.35
KT4D28S-5R6NCS	5.6	±30%	98.9	1.19
KT4D28S-6R8NCS	6.8	±30%	107	1.14
KT4D28S-8R2NCS	8.2	±30%	115	1.06
KT4D28S-100NCS	10	±30%	126	1.02
KT4D28S-120NCS	12	±30%	129	0.86
KT4D28S-150NCS	15	±30%	146	0.78
KT4D28S-180NCS	18	±30%	163	0.73
KT4D28S-220NCS	22	±30%	230	0.71
KT4D28S-270NCS	27	±30%	256	0.59
KT4D28S-330NCS	33	±30%	325	0.57
KT4D28S-390NCS	39	±30%	376	0.51
KT4D28S-470NCS	47	±30%	575	0.49
KT4D28S-560NCS	56	±30%	612	0.42
KT4D28S-680NCS	68	±30%	685	0.36
KT4D28S-820NCS	82	±30%	897	0.33
KT4D28S-101NCS	100	±30%	1000	0.30
KT4D28S-121NCS	120	±30%	1245	0.28
KT4D28S-151NCS	150	±30%	1323	0.24
KT4D28S-181NCS	180	±30%	1509	0.22

**KT5D18S Electrical Characteristics**

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KT5D18S-3R3NCS	3.3	±30%	46.1	2.04
KT5D18S-4R7NCS	4.7	±30%	58.0	1.92
KT5D18S-100NCS	10	±30%	122	1.22
KT5D18S-120NCS	12	±30%	150	1.12
KT5D18S-150NCS	15	±30%	192	0.99
KT5D18S-180NCS	18	±30%	206	0.87
KT5D18S-220NCS	22	±30%	284	0.82
KT5D18S-270NCS	27	±30%	323	0.77
KT5D18S-330NCS	33	±30%	377	0.66
KT5D18S-390NCS	39	±30%	510	0.58
KT5D18S-470NCS	47	±30%	583	0.55
KT5D18S-560NCS	56	±30%	652	0.51
KT5D18S-680NCS	68	±30%	823	0.44
KT5D18S-820NCS	82	±30%	958	0.42
KT5D18S-101NCS	100	±30%	1176	0.37

All specifications are subject to change without notice.

**KT5D28S Electrical Characteristics**

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KT5D28S-2R5NCS	2.5	±30%	17.6	2.65
KT5D28S-3R0NCS	3.0	±30%	23.5	2.45
KT5D28S-4R2NCS	4.2	±30%	30.4	2.24
KT5D28S-4R7NCS	4.7	±30%	33.0	2.10
KT5D28S-5R3NCS	5.3	±30%	37.2	1.94
KT5D28S-6R2NCS	6.2	±30%	44.1	1.84
KT5D28S-8R2NCS	8.2	±30%	51.9	1.63
KT5D28S-100NCS	10	±30%	63.7	1.33
KT5D28S-120NCS	12	±30%	74.5	1.22
KT5D28S-150NCS	15	±30%	101	1.12
KT5D28S-180NCS	18	±30%	108	1.02
KT5D28S-220NCS	22	±30%	120	0.92
KT5D28S-270NCS	27	±30%	172	0.87
KT5D28S-330NCS	33	±30%	185	0.77
KT5D28S-390NCS	39	±30%	208	0.71
KT5D28S-470NCS	47	±30%	245	0.63
KT5D28S-560NCS	56	±30%	299	0.59
KT5D28S-680NCS	68	±30%	348	0.53
KT5D28S-820NCS	82	±30%	454	0.47
KT5D28S-101NCS	100	±30%	510	0.43

**KT6D28S Electrical Characteristics**

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KT6D28S-2R2NCS	2.2	±30%	18.0	3.50
KT6D28S-3R9NCS	3.9	±30%	26.5	2.65
KT6D28S-5R0NCS	5.0	±30%	30.4	2.45
KT6D28S-6R0NCS	6.0	±30%	34.3	2.30
KT6D28S-7R3NCS	7.3	±30%	52.9	2.14
KT6D28S-8R6NCS	8.6	±30%	56.8	1.89
KT6D28S-100NCS	10	±30%	63.7	1.73
KT6D28S-120NCS	12	±30%	68.6	1.58
KT6D28S-150NCS	15	±30%	82.3	1.43
KT6D28S-180NCS	18	±30%	93	1.35
KT6D28S-220NCS	22	±30%	125	1.22
KT6D28S-270NCS	27	±30%	139	1.07
KT6D28S-330NCS	33	±30%	162	0.99
KT6D28S-390NCS	39	±30%	206	0.88
KT6D28S-470NCS	47	±30%	233	0.82
KT6D28S-560NCS	56	±30%	271	0.74
KT6D28S-680NCS	68	±30%	298	0.66
KT6D28S-820NCS	82	±30%	382	0.61
KT6D28S-101NCS	100	±30%	524	0.55

All specifications are subject to change without notice.

**KT6D38S Electrical Characteristics**

Part Number	Inductance (uH) ①	Inductance tolerance	DCR max. (mΩ) ②	Rated current (A) ③
KT6D38S-3R3NCS	3.3	±30%	19.6	3.57
KT6D38S-100NCS	10	±30%	37.2	2.04
KT6D38S-120NCS	12	±30%	51.9	1.73
KT6D38S-150NCS	15	±30%	55.9	1.63
KT6D38S-180NCS	18	±30%	90.2	1.53
KT6D38S-220NCS	22	±30%	94	1.33
KT6D38S-270NCS	27	±30%	107	1.22
KT6D38S-330NCS	33	±30%	122	1.12
KT6D38S-390NCS	39	±30%	135	1.02
KT6D38S-470NCS	47	±30%	152	0.97
KT6D38S-560NCS	56	±30%	198	0.87
KT6D38S-680NCS	68	±30%	229	0.77
KT6D38S-820NCS	82	±30%	318	0.71
KT6D38S-101NCS	100	±30%	351	0.66

① Inductance tested at 100kHz, 0.1 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 ( $T_a = 20^\circ\text{C}$ ).