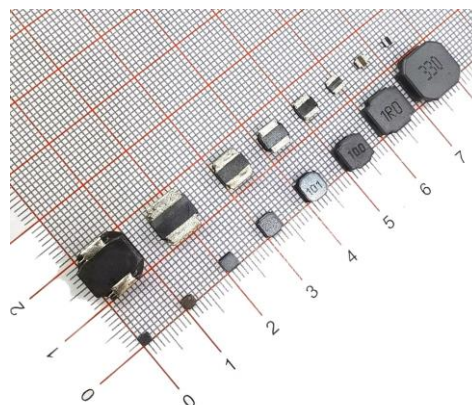


Product Outline

- Magnetic powder epoxy coating reduces buzz noise to a low level.
- A wide range of product line up is available to meet the various requirements.
- For DC/DC converter applications.
- Ideally used in the devices such as smartphone, car navigation, flat-screen TVs, smart screen, notebook PC, LED lighting, various power modules, etc.
- Custom design is also available.



Dimensions(mm)

Fig.1

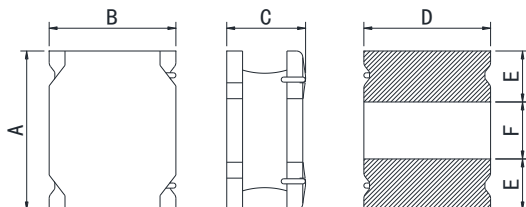


Fig.2

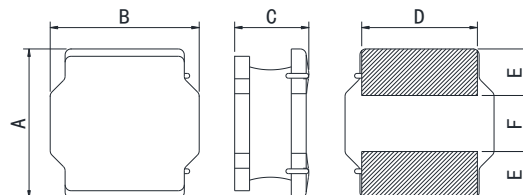


Fig.3

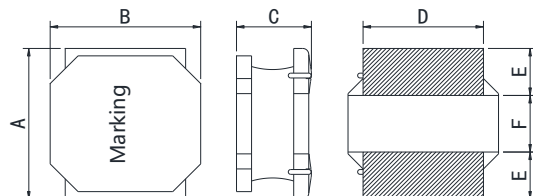
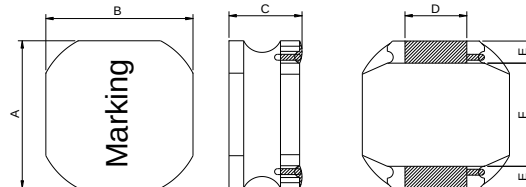
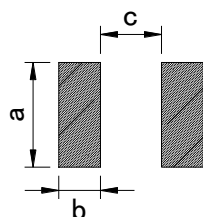


Fig.4



Recommended Patterns



unit: mm

Type	Shape	A	B	C	D	E	F	a	b	c	Packaging (pcs/reel)
KTNR252010S	Fig.1	2.5±0.1	2.0±0.1	1.0 Max.	2.0±0.1	0.8	0.8	2.0	0.85	0.8	2000
KTNR252012S	Fig.1	2.5±0.1	2.0±0.1	1.2 Max.	2.0±0.1	0.8	0.8	2.0	0.85	0.8	2000
KTNR3012S	Fig.2	3.0±0.2	3.0±0.2	1.2 Max.	2.5±0.2	0.75	1.5	2.7	0.8	1.5	2000
KTNR3015S	Fig.2	3.0±0.2	3.0±0.2	1.5 Max.	2.5±0.2	0.75	1.5	2.7	0.8	1.5	2000
KTNR4012S	Fig.2	4.0±0.2	4.0±0.2	1.2 Max.	3.3±0.2	0.95	2.1	3.7	1.1	1.9	4500
KTNR4018S	Fig.2	4.0±0.2	4.0±0.2	1.8 Max.	3.3±0.2	0.95	2.1	3.7	1.1	1.9	3000
KTNR4020S	Fig.2	4.0±0.2	4.0±0.2	2.0 Max.	3.3±0.2	0.95	2.1	3.7	1.1	1.9	3000
KTNR4030S	Fig.2	4.0±0.2	4.0±0.2	3.0 Max.	3.3±0.2	0.95	2.1	3.7	1.1	1.9	2000
KTNR5020S	Fig.2	5.0±0.2	5.0±0.2	2.0 Max.	4.0±0.2	1.25	2.5	4.2	1.4	2.3	2500
KTNR5040S	Fig.2	5.0±0.2	5.0±0.2	4.0 Max.	4.0±0.2	1.25	2.5	4.2	1.4	2.3	1500
KTNR6012S	Fig.2	6.0±0.3	6.0±0.3	1.2 Max.	4.9±0.3	1.55	2.9	5.7	1.7	2.8	2500
KTNR6020S	Fig.2	6.0±0.3	6.0±0.3	2.0 Max.	4.9±0.3	1.55	2.9	5.7	1.7	2.8	2500
KTNR6028S	Fig.2	6.0±0.3	6.0±0.3	2.8 Max.	4.9±0.3	1.55	2.9	5.7	1.7	2.8	2000
KTNR6045S	Fig.2	6.0±0.3	6.0±0.3	4.5 Max.	4.9±0.3	1.55	2.9	5.7	1.7	2.8	1500
KTNR8040S	Fig.2	8.0±0.3	8.0±0.3	4.2 Max.	6.3±0.3	2.0	4.0	7.5	2.2	3.8	1000
KTNR8050S	Fig.2	8.0±0.3	8.0±0.3	5.0 Max.	6.3±0.3	2.0	4.0	7.5	2.2	3.8	1000
KTNR8060S	Fig.2	8.0±0.3	8.0±0.3	6.0 Max.	6.3±0.3	2.0	4.0	7.5	2.2	3.8	1000
KTNR8065S	Fig.3	8.0±0.3	8.0±0.3	6.5 Max.	6.3±0.3	2.0	4.0	7.5	2.2	3.8	800
KTNR1050S	Fig.4	10.0±0.3	10.0±0.3	5.0 Max.	4.2±0.3	2.9	6.4	5.5	2.0	6.2	800

Dimensions without tolerance are typical.

Product Identification

KTNR 6045 S - 4R7 M C S
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Product Series No.
- ② Dimension symbol: 6045=6.0 x 4.5mm (L x H)
- ③ Internal control code.
- ④ Inductance value: 100=10×10⁰ uH=10 uH 4R7=4.7uH, 101=100uH, 102=1.0mH
- ⑤ Tolerance: K=±10%, M=±20%, N=±30%, P=±35%
- ⑥ Packing Style: C=Carrier Taping, B=Bulk.
- ⑦ Characteristic parameter level.

KTNR252010S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR252010S-R24NCS	0.22	±30%	36	3.60	4.40	3.00	3.50
KTNR252010S-R33NCS	0.33	±30%	48	3.50	4.30	2.40	2.76
KTNR252010S-R47NCS	0.47	±30%	56	2.50	3.35	2.35	2.56
KTNR252010S-R56NCS	0.56	±30%	72	2.90	3.20	2.00	2.18
KTNR252010S-R68NCS	0.68	±30%	74	2.20	2.75	2.00	2.18
KTNR252010S-1R0NCS	1.0	±30%	108	1.85	2.20	1.65	1.80
KTNR252010S-1R5NCS	1.5	±30%	182	1.80	2.10	1.30	1.42
KTNR252010S-2R2NCS	2.2	±30%	209	1.20	1.60	1.20	1.31
KTNR252010S-3R3MCS	3.3	±20%	328	1.05	1.30	0.90	0.98
KTNR252010S-4R7MCS	4.7	±20%	563	0.95	1.15	0.70	0.76
KTNR252010S-5R6MCS	5.6	±20%	563	0.80	0.95	0.73	0.80
KTNR252010S-6R8MCS	6.8	±20%	896	0.78	0.92	0.59	0.64
KTNR252010S-100MCS	10	±20%	1092	0.65	0.78	0.50	0.55
KTNR252010S-150MCS	15	±20%	1508	0.40	0.60	0.50	0.55
KTNR252010S-220MCS	22	±20%	1625	0.40	0.48	0.45	0.50

KTNR252012S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR252012S-R22NCS	0.22	±30%	47	6.10	6.50	2.20	2.57
KTNR252012S-R33NCS	0.33	±30%	47	4.00	5.00	2.20	2.57
KTNR252012S-R47NCS	0.47	±30%	61	3.82	4.27	2.15	2.34
KTNR252012S-R68NCS	0.68	±30%	74	3.28	3.68	1.95	2.13
KTNR252012S-1R0NCS	1.0	±30%	90	2.59	2.90	1.93	2.10
KTNR252012S-1R2NCS	1.2	±30%	129	2.38	2.67	1.46	1.59
KTNR252012S-1R5MCS	1.5	±20%	147	2.24	2.51	1.40	1.53
KTNR252012S-2R2MCS	2.2	±20%	216	1.85	2.07	1.15	1.25
KTNR252012S-2R7MCS	2.7	±20%	239	1.72	1.92	1.09	1.19
KTNR252012S-3R3MCS	3.3	±20%	264	1.61	1.80	1.04	1.13
KTNR252012S-3R6MCS	3.6	±20%	348	1.46	1.64	0.90	0.98
KTNR252012S-4R3MCS	4.3	±20%	375	1.37	1.53	0.87	0.95
KTNR252012S-4R7MCS	4.7	±20%	385	1.12	1.25	0.84	0.92
KTNR252012S-5R1MCS	5.1	±20%	500	1.23	1.37	0.75	0.82
KTNR252012S-5R6MCS	5.6	±20%	538	1.11	1.25	0.73	0.80
KTNR252012S-6R2MCS	6.2	±20%	542	1.03	1.18	0.73	0.80
KTNR252012S-6R8MCS	6.8	±20%	581	0.98	1.15	0.69	0.75
KTNR252012S-7R5MCS	7.5	±20%	611	0.97	1.08	0.68	0.74
KTNR252012S-8R2MCS	8.2	±20%	658	0.98	1.05	0.65	0.71
KTNR252012S-9R1MCS	9.1	±20%	685	0.91	1.02	0.62	0.68
KTNR252012S-100MCS	10	±20%	690	0.79	0.90	0.62	0.65
KTNR252012S-120MCS	12	±20%	1075	0.78	0.85	0.51	0.56
KTNR252012S-150MCS	15	±20%	1591	0.68	0.77	0.42	0.46
KTNR252012S-220MCS	22	±20%	1976	0.53	0.59	0.38	0.41

All specifications are subject to change without notice.

KTNR3012S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR3012S-1R0NCS	1.0	$\pm 30\%$	52	2.4	2.8	2.2	2.7
KTNR3012S-1R2NCS	1.2	$\pm 30\%$	59	2.2	2.5	2.1	2.3
KTNR3012S-1R5NCS	1.5	$\pm 30\%$	59	1.62	1.9	2.0	2.2
KTNR3012S-1R8NCS	1.8	$\pm 30\%$	82	1.3	1.8	1.65	1.8
KTNR3012S-2R2NCS	2.2	$\pm 30\%$	98	1.2	1.7	1.6	1.75
KTNR3012S-2R4NCS	2.4	$\pm 30\%$	88	1.15	1.5	1.55	1.65
KTNR3012S-2R7NCS	2.7	$\pm 30\%$	110	1.14	1.4	1.48	1.5
KTNR3012S-3R3MCS	3.3	$\pm 20\%$	130	1.05	1.3	1.36	1.45
KTNR3012S-3R6MCS	3.6	$\pm 20\%$	130	1.05	1.2	1.30	1.40
KTNR3012S-3R9MCS	3.9	$\pm 20\%$	189	1.0	1.15	1.24	1.35
KTNR3012S-4R7MCS	4.7	$\pm 20\%$	156	0.9	1.0	1.24	1.30
KTNR3012S-5R6MCS	5.6	$\pm 20\%$	226	0.8	0.95	1.13	1.24
KTNR3012S-6R8MCS	6.8	$\pm 20\%$	247	0.75	0.90	0.98	1.1
KTNR3012S-100MCS	10	$\pm 20\%$	345	0.6	0.88	0.83	0.9
KTNR3012S-120MCS	12	$\pm 20\%$	449	0.48	0.67	0.73	0.84
KTNR3012S-150MCS	15	$\pm 20\%$	468	0.45	0.62	0.71	0.77
KTNR3012S-180MCS	18	$\pm 20\%$	709	0.43	0.59	0.58	0.65
KTNR3012S-220MCS	22	$\pm 20\%$	839	0.42	0.52	0.53	0.59
KTNR3012S-270MCS	27	$\pm 20\%$	1131	0.35	0.48	0.47	0.51
KTNR3012S-330MCS	33	$\pm 20\%$	1138	0.36	0.46	0.46	0.50
KTNR3012S-360MCS	36	$\pm 20\%$	1235	0.34	0.44	0.44	0.48
KTNR3012S-390MCS	39	$\pm 20\%$	1729	0.3	0.39	0.37	0.41
KTNR3012S-470MCS	47	$\pm 20\%$	1885	0.27	0.35	0.35	0.40
KTNR3012S-560MCS	56	$\pm 20\%$	1794	0.26	0.33	0.28	0.38
KTNR3012S-680MCS	68	$\pm 20\%$	2171	0.24	0.29	0.33	0.36
KTNR3012S-820MCS	82	$\pm 20\%$	3302	0.17	0.27	0.27	0.31
KTNR3012S-101MCS	100	$\pm 20\%$	3718	0.21	0.23	0.25	0.29

KTNR3015S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR3015S-R50NCS	0.5	$\pm 30\%$	39	3.90	4.20	2.60	2.80
KTNR3015S-1R0NCS	1.0	$\pm 30\%$	39	2.50	2.80	2.35	2.50
KTNR3015S-1R2NCS	1.2	$\pm 30\%$	52	2.45	2.70	1.95	2.30
KTNR3015S-1R5NCS	1.5	$\pm 30\%$	65	2.35	2.60	1.70	2.20
KTNR3015S-2R2NCS	2.2	$\pm 30\%$	78	1.60	2.00	1.60	2.00
KTNR3015S-2R7NCS	2.7	$\pm 30\%$	98	1.52	1.90	1.43	1.90
KTNR3015S-3R3MCS	3.3	$\pm 20\%$	104	1.32	1.81	1.36	1.60
KTNR3015S-3R9MCS	3.9	$\pm 20\%$	137	1.20	1.40	1.20	1.50
KTNR3015S-4R7MCS	4.7	$\pm 20\%$	163	1.10	1.35	1.09	1.30
KTNR3015S-6R8MCS	6.8	$\pm 20\%$	260	0.85	1.10	0.85	1.10
KTNR3015S-100MCS	10	$\pm 20\%$	325	0.72	0.92	0.77	0.90
KTNR3015S-120MCS	12	$\pm 20\%$	416	0.70	0.90	0.68	0.89
KTNR3015S-150MCS	15	$\pm 20\%$	455	0.66	0.88	0.65	0.75
KTNR3015S-180MCS	18	$\pm 20\%$	559	0.56	0.72	0.59	0.72

All specifications are subject to change without notice.

KTNR3015S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR3015S-220MCS	22	$\pm 20\%$	598	0.52	0.68	0.57	0.69
KTNR3015S-270MCS	27	$\pm 20\%$	949	0.48	0.56	0.45	0.56
KTNR3015S-330MCS	33	$\pm 20\%$	1066	0.44	0.53	0.43	0.51
KTNR3015S-390MCS	39	$\pm 20\%$	1294	0.41	0.55	0.39	0.44
KTNR3015S-430MCS	43	$\pm 20\%$	1378	0.37	0.43	0.37	0.48
KTNR3015S-470MCS	47	$\pm 20\%$	1625	0.35	0.43	0.35	0.44
KTNR3015S-560MCS	56	$\pm 20\%$	1664	0.33	0.42	0.34	0.41
KTNR3015S-620MCS	62	$\pm 20\%$	2093	0.30	0.40	0.30	0.41
KTNR3015S-680MCS	68	$\pm 20\%$	3510	0.28	0.37	0.23	0.31
KTNR3015S-101MCS	100	$\pm 20\%$	4043	0.23	0.25	0.21	0.25
KTNR3015S-151MCS	150	$\pm 20\%$	4940	0.18	0.22	0.19	0.23

KTNR4012S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR4012S-1R0NCS	1.0	$\pm 30\%$	65	2.90	3.20	1.65	2.50
KTNR4012S-1R2NCS	1.2	$\pm 30\%$	85	2.80	3.10	1.46	2.20
KTNR4012S-1R5NCS	1.5	$\pm 30\%$	85	2.45	2.70	1.40	2.20
KTNR4012S-1R8NCS	1.8	$\pm 30\%$	104	2.35	2.60	1.32	1.90
KTNR4012S-2R2NCS	2.2	$\pm 30\%$	104	2.00	2.40	1.30	1.90
KTNR4012S-2R7NCS	2.7	$\pm 30\%$	117	1.90	2.30	1.25	1.70
KTNR4012S-3R3NCS	3.3	$\pm 30\%$	143	1.72	2.10	1.12	1.60
KTNR4012S-3R6NCS	3.6	$\pm 30\%$	143	1.70	1.80	1.10	1.60
KTNR4012S-4R3NCS	4.3	$\pm 30\%$	182	1.58	1.70	1.00	1.50
KTNR4012S-4R7NCS	4.7	$\pm 30\%$	163	1.30	1.65	1.05	1.50
KTNR4012S-5R6NCS	5.6	$\pm 30\%$	182	1.20	1.60	1.00	1.20
KTNR4012S-6R8MCS	6.8	$\pm 20\%$	257	1.10	1.40	0.84	1.20
KTNR4012S-100MCS	10	$\pm 20\%$	345	0.90	1.10	0.77	1.00
KTNR4012S-120MCS	12	$\pm 20\%$	377	0.80	1.00	0.70	0.95
KTNR4012S-150MCS	15	$\pm 20\%$	442	0.70	0.80	0.64	0.85
KTNR4012S-180MCS	18	$\pm 20\%$	611	0.65	0.75	0.55	0.80
KTNR4012S-220MCS	22	$\pm 20\%$	763	0.60	0.70	0.49	0.75
KTNR4012S-270MCS	27	$\pm 20\%$	936	0.55	0.65	0.45	0.60
KTNR4012S-330MCS	33	$\pm 20\%$	1053	0.48	0.60	0.42	0.58
KTNR4012S-360MCS	36	$\pm 20\%$	1170	0.45	0.55	0.40	0.56
KTNR4012S-390MCS	39	$\pm 20\%$	1430	0.44	0.48	0.37	0.50
KTNR4012S-470MCS	47	$\pm 20\%$	1430	0.40	0.45	0.37	0.50
KTNR4012S-560MCS	56	$\pm 20\%$	1625	0.35	0.43	0.33	0.46
KTNR4012S-680MCS	68	$\pm 20\%$	2535	0.33	0.42	0.27	0.45
KTNR4012S-820MCS	82	$\pm 20\%$	2782	0.30	0.40	0.26	0.36
KTNR4012S-101MCS	100	$\pm 20\%$	2873	0.25	0.30	0.25	0.35

Note:

- ① Inductance tested at 100kHz, 1V using an Agilent/HP 4192A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of its initial value.
- ④ Irms: The DC current at which $\Delta t = 40^\circ\text{C}$.

All specifications are subject to change without notice.

KTNR4018S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR4018S-R47NCS	0.47	$\pm 30\%$	18	4.50	5.20	4.00	4.50
KTNR4018S-R68NCS	0.68	$\pm 30\%$	26	4.30	5.00	3.30	3.80
KTNR4018S-1R0NCS	1.0	$\pm 30\%$	33	4.20	4.50	2.00	3.30
KTNR4018S-1R5NCS	1.5	$\pm 30\%$	39	3.35	4.00	1.80	3.20
KTNR4018S-1R8NCS	1.8	$\pm 30\%$	44	3.00	3.40	2.00	2.80
KTNR4018S-2R2MCS	2.2	$\pm 20\%$	59	2.70	3.20	1.65	2.60
KTNR4018S-3R3MCS	3.3	$\pm 20\%$	91	2.45	2.90	1.23	2.10
KTNR4018S-4R7MCS	4.7	$\pm 20\%$	117	1.70	2.20	1.20	1.80
KTNR4018S-6R8MCS	6.8	$\pm 20\%$	143	1.45	2.00	1.06	1.50
KTNR4018S-100MCS	10	$\pm 20\%$	234	1.30	1.60	0.84	1.20
KTNR4018S-150MCS	15	$\pm 20\%$	325	0.94	1.10	0.65	1.00
KTNR4018S-220MCS	22	$\pm 20\%$	468	0.80	0.88	0.59	0.85
KTNR4018S-330MCS	33	$\pm 20\%$	689	0.56	0.75	0.49	0.72
KTNR4018S-470MCS	47	$\pm 20\%$	845	0.57	0.70	0.42	0.65
KTNR4018S-680MCS	68	$\pm 20\%$	1300	0.47	0.51	0.32	0.52
KTNR4018S-101MCS	100	$\pm 20\%$	2275	0.40	0.44	0.25	0.41
KTNR4018S-151MCS	150	$\pm 20\%$	3250	0.31	0.34	0.22	0.36
KTNR4018S-221MCS	220	$\pm 20\%$	5200	0.27	0.30	0.17	0.27

KTNR4020S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR4020S-R24MCS	0.24	$\pm 20\%$	14	10.5	12.5	4.50	5.20
KTNR4020S-R33NCS	0.33	$\pm 30\%$	16	7.50	8.50	3.30	4.90
KTNR4020S-R47NCS	0.47	$\pm 30\%$	29	7.00	7.50	3.30	3.70
KTNR4020S-R68NCS	0.68	$\pm 30\%$	36	6.40	6.60	2.80	3.30
KTNR4020S-1R0NCS	1.0	$\pm 30\%$	38	4.78	5.20	2.15	3.20
KTNR4020S-1R2NCS	1.2	$\pm 30\%$	38	5.10	5.60	2.15	3.20
KTNR4020S-1R5NCS	1.5	$\pm 30\%$	46	4.45	4.90	1.98	3.00
KTNR4020S-2R2MCS	2.2	$\pm 20\%$	52	3.40	3.70	1.85	2.80
KTNR4020S-3R3MCS	3.3	$\pm 20\%$	91	3.10	3.50	1.40	2.50
KTNR4020S-3R6MCS	3.6	$\pm 20\%$	72	2.70	3.00	1.54	2.40
KTNR4020S-4R7MCS	4.7	$\pm 20\%$	98	2.35	2.50	1.34	2.00
KTNR4020S-5R1MCS	5.1	$\pm 20\%$	111	2.30	2.45	1.27	1.80
KTNR4020S-5R6MCS	5.6	$\pm 20\%$	117	2.20	2.40	1.22	1.80
KTNR4020S-6R2MCS	6.2	$\pm 20\%$	150	2.15	2.30	1.08	1.60
KTNR4020S-6R8MCS	6.8	$\pm 20\%$	163	2.00	2.20	1.04	1.60
KTNR4020S-7R5MCS	7.5	$\pm 20\%$	150	1.85	2.00	1.08	1.50
KTNR4020S-8R2MCS	8.2	$\pm 20\%$	163	1.75	1.90	1.04	1.40
KTNR4020S-100MCS	10	$\pm 20\%$	215	1.60	1.70	0.90	1.20
KTNR4020S-120MCS	12	$\pm 20\%$	228	1.50	1.60	0.88	1.20
KTNR4020S-150MCS	15	$\pm 20\%$	299	1.35	1.50	0.77	1.10
KTNR4020S-220MCS	22	$\pm 20\%$	455	1.05	1.10	0.62	0.87
KTNR4020S-270MCS	27	$\pm 20\%$	709	1.02	1.00	0.50	0.70
KTNR4020S-330MCS	33	$\pm 20\%$	715	0.85	0.93	0.49	0.68

All specifications are subject to change without notice.

KTNR4020S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR4020S-390MCS	39	$\pm 20\%$	845	0.82	0.90	0.46	0.64
KTNR4020S-430MCS	43	$\pm 20\%$	858	0.77	0.85	0.45	0.63
KTNR4020S-470MCS	47	$\pm 20\%$	923	0.74	0.81	0.44	0.61
KTNR4020S-510MCS	51	$\pm 20\%$	975	0.70	0.77	0.42	0.59
KTNR4020S-560MCS	56	$\pm 20\%$	1040	0.66	0.72	0.41	0.57
KTNR4020S-620MCS	62	$\pm 20\%$	1170	0.65	0.71	0.39	0.52
KTNR4020S-680MCS	68	$\pm 20\%$	1380	0.61	0.67	0.36	0.50
KTNR4020S-750MCS	75	$\pm 20\%$	1510	0.58	0.65	0.35	0.49
KTNR4020S-820MCS	82	$\pm 20\%$	1520	0.50	0.55	0.34	0.47
KTNR4020S-101MCS	100	$\pm 20\%$	2020	0.48	0.53	0.31	0.43

KTNR4030S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR4030S-R47NCS	0.47	$\pm 30\%$	10	8.50	9.80	5.20	5.90
KTNR4030S-R56NCS	0.56	$\pm 30\%$	11	8.00	9.40	5.00	5.80
KTNR4030S-R68NCS	0.68	$\pm 30\%$	13	6.80	8.00	4.56	5.10
KTNR4030S-R91NCS	0.91	$\pm 30\%$	17	6.25	6.80	4.15	4.70
KTNR4030S-1R0NCS	1.0	$\pm 30\%$	18	6.00	6.50	4.15	4.70
KTNR4030S-1R2NCS	1.2	$\pm 30\%$	20	5.80	6.30	3.82	4.20
KTNR4030S-1R5NCS	1.5	$\pm 30\%$	26	5.20	5.80	3.34	3.60
KTNR4030S-1R8NCS	1.8	$\pm 30\%$	33	5.00	5.30	3.20	3.30
KTNR4030S-2R2NCS	2.2	$\pm 30\%$	39	4.50	5.00	2.95	3.20
KTNR4030S-3R3MCS	3.3	$\pm 20\%$	52	3.30	4.00	2.40	2.60
KTNR4030S-3R6MCS	3.6	$\pm 20\%$	52	3.05	3.60	2.40	2.60
KTNR4030S-3R9MCS	3.9	$\pm 20\%$	74	3.00	3.30	2.10	2.30
KTNR4030S-4R3MCS	4.3	$\pm 20\%$	72	2.95	3.25	2.10	2.30
KTNR4030S-4R7MCS	4.7	$\pm 20\%$	78	2.90	3.20	2.00	2.30
KTNR4030S-5R6MCS	5.6	$\pm 20\%$	85	2.60	2.80	1.95	2.10
KTNR4030S-6R2MCS	6.2	$\pm 20\%$	117	2.40	2.60	1.75	1.90
KTNR4030S-6R8MCS	6.8	$\pm 20\%$	117	2.00	2.20	1.65	1.80
KTNR4030S-7R5MCS	7.5	$\pm 20\%$	110	1.80	2.00	1.65	1.70
KTNR4030S-8R2MCS	8.2	$\pm 20\%$	117	1.70	1.90	1.60	1.65
KTNR4030S-100MCS	10	$\pm 20\%$	130	1.60	1.80	1.50	1.60
KTNR4030S-120MCS	12	$\pm 20\%$	175	1.50	1.70	1.30	1.40
KTNR4030S-150MCS	15	$\pm 20\%$	247	1.45	1.60	1.11	1.30
KTNR4030S-180MCS	18	$\pm 20\%$	260	1.40	1.50	1.10	1.25
KTNR4030S-220MCS	22	$\pm 20\%$	292	1.30	1.40	1.00	1.20
KTNR4030S-270MCS	27	$\pm 20\%$	338	1.15	1.35	0.90	1.05
KTNR4030S-330MCS	33	$\pm 20\%$	429	1.10	1.25	0.84	0.92
KTNR4030S-360MCS	36	$\pm 20\%$	436	1.05	1.18	0.83	0.91
KTNR4030S-390MCS	39	$\pm 20\%$	566	1.03	1.12	0.73	0.80
KTNR4030S-470MCS	47	$\pm 20\%$	579	0.95	1.08	0.72	0.80
KTNR4030S-510MCS	51	$\pm 20\%$	611	0.90	0.98	0.70	0.80
KTNR4030S-560MCS	56	$\pm 20\%$	722	0.85	0.94	0.65	0.71

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KTNR4030S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR4030S-620MCS	62	$\pm 20\%$	761	0.80	0.99	0.63	0.68
KTNR4030S-680MCS	68	$\pm 20\%$	1128	0.72	0.80	0.52	0.57
KTNR4030S-750MCS	75	$\pm 20\%$	1326	0.70	0.78	0.48	0.53
KTNR4030S-820MCS	82	$\pm 20\%$	1378	0.66	0.73	0.47	0.52
KTNR4030S-910MCS	91	$\pm 20\%$	1430	0.65	0.71	0.46	0.50
KTNR4030S-101MCS	100	$\pm 20\%$	1495	0.60	0.68	0.45	0.49
KTNR4030S-121MCS	120	$\pm 20\%$	1755	0.55	0.60	0.41	0.47
KTNR4030S-151MCS	150	$\pm 20\%$	2340	0.50	0.55	0.38	0.44
KTNR4030S-221MCS	220	$\pm 20\%$	3250	0.40	0.50	0.35	0.40
KTNR4030S-331MCS	330	$\pm 20\%$	5200	0.32	0.40	0.20	0.26
KTNR4030S-471KCS	470	$\pm 10\%$	9360	0.30	0.35	0.19	0.23
KTNR4030S-501MCS	500	$\pm 20\%$	9027	0.26	0.30	0.16	0.20
KTNR4030S-681MCS	680	$\pm 20\%$	9854	0.18	0.20	0.14	0.18

KTNR5020S Electrical Characteristics

Part Number	Inductance (μ H)①	Inductance tolerance	DCR ② (m Ω) Max	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR5020S-R47NCS	0.47	$\pm 30\%$	17	6.20	6.70	4.60	5.00
KTNR5020S-R56NCS	0.56	$\pm 30\%$	22	6.00	6.50	4.20	4.50
KTNR5020S-R68NCS	0.68	$\pm 30\%$	22	5.50	6.00	4.00	4.40
KTNR5020S-R75NCS	0.75	$\pm 30\%$	22	5.30	5.80	4.00	4.40
KTNR5020S-1R0NCS	1.0	$\pm 30\%$	26	4.60	5.00	3.80	4.10
KTNR5020S-1R2NCS	1.2	$\pm 30\%$	29	4.50	4.90	3.55	3.90
KTNR5020S-1R5NCS	1.5	$\pm 30\%$	34	4.10	4.50	3.20	3.50
KTNR5020S-2R2NCS	2.2	$\pm 30\%$	42	3.20	4.00	2.90	3.10
KTNR5020S-2R7NCS	2.7	$\pm 30\%$	49	2.90	3.50	2.70	2.90
KTNR5020S-3R0NCS	3.0	$\pm 30\%$	49	2.70	3.30	2.70	2.90
KTNR5020S-3R3NCS	3.3	$\pm 30\%$	56	2.60	3.20	2.50	2.70
KTNR5020S-3R6NCS	3.6	$\pm 30\%$	56	2.40	3.00	2.50	2.70
KTNR5020S-3R9NCS	3.9	$\pm 30\%$	56	2.30	2.80	2.50	2.70
KTNR5020S-4R7MCS	4.7	$\pm 20\%$	74	2.20	2.70	2.20	2.40
KTNR5020S-5R6MCS	5.6	$\pm 20\%$	83	2.10	2.50	2.05	2.20
KTNR5020S-6R8MCS	6.8	$\pm 20\%$	108	2.00	2.20	1.80	1.90
KTNR5020S-7R5MCS	7.5	$\pm 20\%$	117	1.85	2.00	1.75	1.90
KTNR5020S-8R2MCS	8.2	$\pm 20\%$	127	1.75	1.90	1.65	1.80
KTNR5020S-100MCS	10	$\pm 20\%$	143	1.70	1.80	1.55	1.70
KTNR5020S-120MCS	12	$\pm 20\%$	182	1.50	1.60	1.40	1.50
KTNR5020S-150MCS	15	$\pm 20\%$	215	1.35	1.40	1.25	1.30
KTNR5020S-180MCS	18	$\pm 20\%$	260	1.25	1.30	1.15	1.20
KTNR5020S-220MCS	22	$\pm 20\%$	294	1.15	1.20	1.10	1.20
KTNR5020S-330MCS	33	$\pm 20\%$	507	0.92	1.00	0.90	0.99
KTNR5020S-470MCS	47	$\pm 20\%$	680	0.82	0.90	0.77	0.84
KTNR5020S-560MCS	56	$\pm 20\%$	819	0.75	0.84	0.70	0.77
KTNR5020S-680MCS	68	$\pm 20\%$	962	0.68	0.70	0.64	0.70
KTNR5020S-820MCS	82	$\pm 20\%$	1158	0.65	0.75	0.50	0.60
KTNR5020S-101MCS	100	$\pm 20\%$	1430	0.53	0.58	0.53	0.58
KTNR5020S-121MCS	120	$\pm 20\%$	1755	0.42	0.53	0.40	0.50

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KTNR5040S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR5040S-R22NCS	0.22	$\pm 30\%$	8	18.0	20.0	6.50	7.50
KTNR5040S-R24NCS	0.24	$\pm 30\%$	8	15.7	18.0	6.40	7.40
KTNR5040S-R47NCS	0.47	$\pm 30\%$	9	10.0	11.5	6.60	7.60
KTNR5040S-1R0NCS	1.0	$\pm 30\%$	16	7.35	8.20	4.90	5.10
KTNR5040S-1R5NCS	1.5	$\pm 30\%$	20	6.30	7.30	4.30	4.80
KTNR5040S-2R2NCS	2.2	$\pm 30\%$	25	4.90	5.60	3.80	4.30
KTNR5040S-2R7NCS	2.7	$\pm 30\%$	29	4.30	5.10	3.60	4.10
KTNR5040S-3R0NCS	3.0	$\pm 30\%$	29	4.15	4.80	3.60	4.20
KTNR5040S-3R3NCS	3.3	$\pm 30\%$	31	3.95	4.60	3.40	3.90
KTNR5040S-4R7MCS	4.7	$\pm 20\%$	39	3.50	3.90	3.00	3.30
KTNR5040S-5R6MCS	5.6	$\pm 20\%$	46	3.00	4.10	2.80	3.10
KTNR5040S-6R8MCS	6.8	$\pm 20\%$	56	2.90	3.50	2.50	2.80
KTNR5040S-8R2MCS	8.2	$\pm 20\%$	62	2.70	3.00	2.30	2.60
KTNR5040S-100MCS	10	$\pm 20\%$	83	2.35	2.90	2.10	2.40
KTNR5040S-120MCS	12	$\pm 20\%$	100	2.20	2.50	2.00	2.10
KTNR5040S-150MCS	15	$\pm 20\%$	112	2.00	2.30	2.00	2.10
KTNR5040S-180MCS	18	$\pm 20\%$	155	1.70	2.00	1.45	1.65
KTNR5040S-220MCS	22	$\pm 20\%$	168	1.60	1.90	1.50	1.60
KTNR5040S-270MCS	27	$\pm 20\%$	244	1.52	1.75	1.10	1.25
KTNR5040S-330MCS	33	$\pm 20\%$	244	1.30	1.50	1.20	1.40
KTNR5040S-470MCS	47	$\pm 20\%$	354	1.10	1.30	1.00	1.10
KTNR5040S-510MCS	51	$\pm 20\%$	494	1.00	1.20	1.00	1.10
KTNR5040S-560MCS	56	$\pm 20\%$	494	1.05	1.20	0.80	0.90
KTNR5040S-680MCS	68	$\pm 20\%$	520	0.90	1.10	0.80	0.90
KTNR5040S-750MCS	75	$\pm 20\%$	585	0.85	0.95	0.72	0.80
KTNR5040S-101MCS	100	$\pm 20\%$	728	0.75	0.90	0.70	0.80
KTNR5040S-151MCS	150	$\pm 20\%$	975	0.65	0.67	0.60	0.70
KTNR5040S-221MCS	220	$\pm 20\%$	1820	0.48	0.55	0.40	0.50
KTNR5040S-301MCS	300	$\pm 20\%$	2600	0.50	0.58	0.35	0.40
KTNR5040S-331MCS	330	$\pm 20\%$	2730	0.42	0.47	0.40	0.50
KTNR5040S-471MCS	470	$\pm 20\%$	3900	0.37	0.43	0.35	0.40
KTNR5040S-561MCS	560	$\pm 20\%$	4914	0.31	0.36	0.31	0.35
KTNR5040S-681MCS	680	$\pm 20\%$	5070	0.30	0.35	0.25	0.30
KTNR5040S-102MCS	1000	$\pm 20\%$	7800	0.21	0.25	0.20	0.23
KTNR5040S-152MCS	1500	$\pm 20\%$	10582	0.20	0.23	0.19	0.22
KTNR5040S-202MCS	2000	$\pm 20\%$	14760	0.17	0.20	0.14	0.16
KTNR5040S-332MCS	3300	$\pm 20\%$	25200	0.14	0.16	0.10	0.12
KTNR5040S-392MCS	3900	$\pm 20\%$	30550	0.125	0.15	0.10	0.115
KTNR5040S-472MCS	4700	$\pm 20\%$	45500	0.12	0.14	0.08	0.10
KTNR5040S-502MCS	5000	$\pm 20\%$	43160	0.11	0.13	0.085	0.098
KTNR5040S-562MCS	5600	$\pm 20\%$	50700	0.105	0.12	0.08	0.092
KTNR5040S-682MCS	6800	$\pm 20\%$	55900	0.09	0.11	0.075	0.086
KTNR5040S-822MCS	8200	$\pm 20\%$	55900	0.07	0.085	0.075	0.086
KTNR5040S-103MCS	10000	$\pm 20\%$	58500	0.065	0.075	0.075	0.086

All specifications are subject to change without notice.

KTNR6012S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) Max.	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) max.	I rms ④ (A) typ.
KTNR6012S-1R0NCS	1.00	±30%	55	3.12	3.52	2.09	2.30
KTNR6012S-1R5NCS	1.50	±30%	75	2.42	2.73	1.82	2.00
KTNR6012S-2R5NCS	2.5	±30%	90	1.86	2.10	1.63	1.80
KTNR6012S-3R3NCS	3.3	±30%	105	1.59	1.80	1.54	1.70
KTNR6012S-4R7NCS	4.7	±30%	125	1.42	1.60	1.41	1.55
KTNR6012S-5R3NCS	5.3	±30%	125	1.33	1.50	1.35	1.5
KTNR6012S-6R8NCS	6.8	±30%	165	1.15	1.30	1.23	1.35
KTNR6012S-100MCS	10	±20%	200	0.89	1.00	1.09	1.20
KTNR6012S-150MCS	15	±20%	295	0.72	0.82	0.73	0.80
KTNR6012S-220MCS	22	±20%	465	0.67	0.76	0.59	0.65
KTNR6012S-330MCS	33	±20%	580	0.52	0.59	0.50	0.55
KTNR6012S-470MCS	47	±20%	810	0.46	0.52	0.42	0.46
KTNR6012S-680MCS	68	±20%	1160	0.39	0.44	0.37	0.41
KTNR6012S-101MCS	100	±20%	1670	0.31	0.35	0.29	0.32

KTNR6020S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) Max	I sat ③ (A) max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR6020S-1R5NCS	1.5	±30%	29	4.30	5.10	3.20	4.00
KTNR6020S-1R8NCS	1.8	±30%	35	4.15	5.00	2.90	3.50
KTNR6020S-2R0NCS	2.0	±30%	36	4.10	4.80	2.80	3.40
KTNR6020S-2R2NCS	2.2	±30%	40	3.90	4.60	2.70	3.30
KTNR6020S-2R7NCS	2.7	±30%	46	3.70	4.50	2.60	3.20
KTNR6020S-3R3NCS	3.3	±30%	48	3.50	3.80	2.50	3.10
KTNR6020S-3R9NCS	3.9	±30%	64	3.25	3.70	2.30	2.80
KTNR6020S-4R3NCS	4.3	±30%	66	2.70	3.30	2.20	2.60
KTNR6020S-4R7NCS	4.7	±30%	75	2.60	3.00	2.00	2.50
KTNR6020S-5R6NCS	5.6	±30%	77	2.40	2.90	1.90	2.40
KTNR6020S-6R2NCS	6.2	±30%	100	2.30	2.70	1.80	2.30
KTNR6020S-6R8NCS	6.8	±30%	103	2.20	2.60	1.70	2.20
KTNR6020S-8R2NCS	8.2	±30%	135	2.10	2.50	1.50	1.90
KTNR6020S-100MCS	10	±20%	137	1.75	2.10	1.40	1.80
KTNR6020S-120MCS	12	±20%	156	1.45	1.70	1.30	1.60
KTNR6020S-150MCS	15	±20%	189	1.25	1.45	1.20	1.50
KTNR6020S-180MCS	18	±20%	234	1.15	1.30	1.08	1.40
KTNR6020S-220MCS	22	±20%	256	1.05	1.20	1.00	1.30
KTNR6020S-330MCS	33	±20%	390	0.95	1.10	0.84	1.05
KTNR6020S-470MCS	47	±20%	559	0.70	0.90	0.80	0.90
KTNR6020S-680MCS	68	±20%	820	0.65	0.75	0.75	0.86
KTNR6020S-101MCS	100	±20%	1200	0.55	0.65	0.50	0.58
KTNR6020S-151MCS	150	±20%	2080	0.50	0.60	0.45	0.52
KTNR6020S-221MCS	220	±20%	3460	0.45	0.55	0.35	0.41
KTNR6020S-331MCS	330	±20%	3419	0.27	0.33	0.33	0.39

All specifications are subject to change without notice.

KTNR6028S Electrical Characteristics

Part Number	Inductance ^① (μ H)	Inductance tolerance	DCR ^② (m Ω) Max.	I sat ^③ (A) Max.	I sat ^③ (A) typ.	I rms ^④ (A) Max.	I rms ^④ (A) typ.
KTNR6028S-R82NCS	0.82	$\pm 30\%$	12	7.80	9.00	5.20	6.00
KTNR6028S-1R0NCS	1.0	$\pm 30\%$	13	7.00	8.00	5.10	5.70
KTNR6028S-1R2NCS	1.2	$\pm 30\%$	17	6.40	7.50	4.70	5.20
KTNR6028S-1R5NCS	1.5	$\pm 30\%$	17	6.00	6.60	4.58	5.00
KTNR6028S-2R2NCS	2.2	$\pm 30\%$	26	5.10	5.60	3.75	4.10
KTNR6028S-2R7NCS	2.7	$\pm 30\%$	26	4.50	5.00	3.68	4.00
KTNR6028S-3R3NCS	3.3	$\pm 30\%$	33	4.15	4.50	3.48	3.80
KTNR6028S-4R7NCS	4.7	$\pm 30\%$	39	3.50	3.80	3.08	3.40
KTNR6028S-5R1NCS	5.1	$\pm 30\%$	56	3.20	3.50	2.60	2.80
KTNR6028S-6R2MCS	6.2	$\pm 20\%$	61	3.00	3.30	2.40	2.65
KTNR6028S-6R8MCS	6.8	$\pm 20\%$	61	2.60	3.00	2.35	2.60
KTNR6028S-8R2MCS	8.2	$\pm 20\%$	72	2.30	2.50	2.25	2.50
KTNR6028S-9R1MCS	9.1	$\pm 20\%$	96	2.10	2.40	2.15	2.45
KTNR6028S-100MCS	10	$\pm 20\%$	94	2.05	2.30	1.95	2.40
KTNR6028S-120MCS	12	$\pm 20\%$	104	1.80	2.00	1.85	2.00
KTNR6028S-150MCS	15	$\pm 20\%$	163	1.75	1.90	1.55	1.70
KTNR6028S-180MCS	18	$\pm 20\%$	156	1.52	1.80	1.45	1.60
KTNR6028S-220MCS	22	$\pm 20\%$	182	1.45	1.70	1.40	1.55
KTNR6028S-270MCS	27	$\pm 20\%$	202	1.4	1.60	1.32	1.40
KTNR6028S-330MCS	33	$\pm 20\%$	241	1.35	1.50	1.22	1.30
KTNR6028S-360MCS	36	$\pm 20\%$	280	1.25	1.45	1.13	1.20
KTNR6028S-390MCS	39	$\pm 20\%$	293	1.20	1.40	1.10	1.15
KTNR6028S-470MCS	47	$\pm 20\%$	410	1.15	1.30	1.06	1.10
KTNR6028S-560MCS	56	$\pm 20\%$	449	1.05	1.20	0.89	1.00
KTNR6028S-680MCS	68	$\pm 20\%$	468	0.90	1.00	0.86	0.95
KTNR6028S-750MCS	75	$\pm 20\%$	533	0.80	0.95	0.81	0.90
KTNR6028S-820MCS	82	$\pm 20\%$	650	0.75	0.88	0.75	0.85
KTNR6028S-101MCS	100	$\pm 20\%$	650	0.65	0.71	0.70	0.77
KTNR6028S-401MCS	400	$\pm 20\%$	2808	0.30	0.33	0.40	0.45
KTNR6028S-102MCS	1000	$\pm 20\%$	7540	0.18	0.22	0.23	0.26

Note:

- ① Inductance tested at 100kHz, 1V using an Agilent/HP 4192A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of its initial value.
- ④ Irms: The DC current at which $\Delta t = 40^\circ\text{C}$.

KTNR6045S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR6045S-R47NCS	0.47	±30%	8	15.00	16.50	6.8	7.8
KTNR6045S-R56NCS	0.56	±30%	8	14.00	15.00	6.5	7.5
KTNR6045S-R68NCS	0.68	±30%	8	11.00	12.00	5.8	6.5
KTNR6045S-R82NCS	0.82	±30%	10	10.35	11.00	5.7	6.0
KTNR6045S-1R0NCS	1.0	±30%	14	9.85	10.00	5.4	5.8
KTNR6045S-1R2NCS	1.2	±30%	13	9.0	9.70	5.2	5.5
KTNR6045S-1R5NCS	1.5	±30%	16	8.5	9.0	4.9	5.40
KTNR6045S-1R8NCS	1.8	±30%	16	7.60	8.40	4.8	5.30
KTNR6045S-2R2NCS	2.2	±30%	18	6.75	7.40	4.6	5.00
KTNR6045S-2R7NCS	2.7	±30%	20	5.95	6.30	4.3	4.7
KTNR6045S-3R3NCS	3.3	±30%	27	5.80	6.20	3.8	4.2
KTNR6045S-3R6NCS	3.6	±30%	27	5.25	5.70	3.7	4.0
KTNR6045S-4R5MCS	4.5	±20%	34	5.00	5.60	3.4	3.7
KTNR6045S-4R7MCS	4.7	±20%	34	4.90	5.50	3.3	3.6
KTNR6045S-5R1MCS	5.1	±20%	34	4.40	4.80	3.2	3.5
KTNR6045S-5R6MCS	5.6	±20%	38	4.15	4.60	3.15	3.4
KTNR6045S-6R8MCS	6.8	±20%	40	3.90	4.30	2.9	3.3
KTNR6045S-8R2MCS	8.2	±20%	56	3.80	4.20	2.6	2.8
KTNR6045S-100MCS	10	±20%	62	3.20	3.50	2.45	2.7
KTNR6045S-120MCS	12	±20%	75	2.80	3.00	2.20	2.4
KTNR6045S-150MCS	15	±20%	88	2.50	2.70	2.05	2.2
KTNR6045S-180MCS	18	±20%	105	2.20	2.40	1.85	2.1
KTNR6045S-220MCS	22	±20%	116	2.05	2.20	1.80	2.0
KTNR6045S-270MCS	27	±20%	133	1.90	2.10	1.65	1.8
KTNR6045S-300MCS	30	±20%	172	1.70	1.85	1.50	1.65
KTNR6045S-330MCS	33	±20%	178	1.65	1.80	1.45	1.6
KTNR6045S-360MCS	36	±20%	225	1.62	1.75	1.40	1.5
KTNR6045S-390MCS	39	±20%	234	1.50	1.60	1.35	1.4
KTNR6045S-430MCS	43	±20%	260	1.45	1.55	1.25	1.35
KTNR6045S-470MCS	47	±20%	260	1.40	1.50	1.20	1.3
KTNR6045S-510MCS	51	±20%	269	1.3	1.40	1.15	1.2
KTNR6045S-560MCS	56	±20%	287	1.25	1.38	1.10	1.15
KTNR6045S-620MCS	62	±20%	306	1.15	1.35	1.05	1.10
KTNR6045S-680MCS	68	±20%	376	1.1	1.30	1.00	1.05
KTNR6045S-750MCS	75	±20%	397	1.05	1.20	0.95	1.00
KTNR6045S-820MCS	82	±20%	443	1.0	1.10	0.90	0.99
KTNR6045S-101MCS	100	±20%	563	0.90	1.00	0.80	0.86
KTNR6045S-121MCS	120	±20%	629	0.85	0.94	0.77	0.84
KTNR6045S-151MCS	150	±20%	754	0.80	0.88	0.70	0.75
KTNR6045S-221MCS	220	±20%	1084	0.70	0.77	0.59	0.65
KTNR6045S-331MCS	330	±20%	1651	0.57	0.63	0.57	0.63
KTNR6045S-471MCS	470	±20%	2340	0.50	0.56	0.42	0.48
KTNR6045S-681MCS	680	±20%	3250	0.42	0.46	0.33	0.38
KTNR6045S-102MCS	1000	±20%	5850	0.30	0.35	0.30	0.35
KTNR6045S-152MCS	1500	±20%	8450	0.24	0.27	0.21	0.24

All specifications are subject to change without notice.

KTNR8040S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR8040S-R82NCS	0.82	±30%	10	13.5	15.0	6.50	7.00
KTNR8040S-1R0NCS	1.0	±30%	10	12.0	14.0	6.30	6.80
KTNR8040S-1R2NCS	1.2	±30%	13	11.5	13.5	5.75	6.30
KTNR8040S-1R5NCS	1.5	±30%	13	9.8	11.0	5.65	6.20
KTNR8040S-2R0NCS	2.0	±30%	16	8.8	10.0	5.25	5.70
KTNR8040S-2R2NCS	2.2	±30%	16	7.10	8.00	5.15	5.60
KTNR8040S-3R0NCS	3.0	±30%	18	6.10	7.3	4.70	5.20
KTNR8040S-3R3NCS	3.3	±30%	22	6.50	7.0	4.50	4.90
KTNR8040S-3R6MCS	3.6	±20%	22	6.2	6.80	4.4	4.80
KTNR8040S-3R9NCS	3.9	±30%	22	5.75	6.50	4.35	4.70
KTNR8040S-4R7NCS	4.7	±30%	25	5.72	6.20	4.10	4.50
KTNR8040S-5R6NCS	5.6	±30%	27	5.70	6.00	3.85	4.20
KTNR8040S-6R2NCS	6.2	±30%	27	4.45	5.10	3.70	4.10
KTNR8040S-6R8MCS	6.8	±20%	31	4.35	5.00	3.60	4.00
KTNR8040S-8R2MCS	8.2	±20%	34	4.20	4.80	3.45	3.80
KTNR8040S-100MCS	10	±20%	38	3.60	4.10	3.30	3.60
KTNR8040S-120MCS	12	±20%	53	3.50	4.00	2.80	3.00
KTNR8040S-150MCS	15	±20%	61	2.95	3.40	2.60	2.80
KTNR8040S-180MCS	18	±20%	69	2.70	3.10	2.40	2.60
KTNR8040S-220MCS	22	±20%	90	2.40	2.70	2.10	2.30
KTNR8040S-270MCS	27	±20%	101	2.15	2.50	2.00	2.20
KTNR8040S-330MCS	33	±20%	126	2.05	2.40	1.80	2.00
KTNR8040S-360MCS	36	±20%	133	2.00	2.30	1.75	1.90
KTNR8040S-390MCS	39	±20%	139	1.95	2.20	1.70	1.85
KTNR8040S-430MCS	43	±20%	147	1.90	2.15	1.65	1.80
KTNR8040S-470MCS	47	±20%	177	1.75	2.00	1.55	1.70
KTNR8040S-510MCS	51	±20%	185	1.70	1.90	1.50	1.60
KTNR8040S-560MCS	56	±20%	192	1.55	1.70	1.45	1.55
KTNR8040S-620MCS	62	±20%	237	1.50	1.65	1.30	1.40
KTNR8040S-680MCS	68	±20%	255	1.45	1.60	1.25	1.35
KTNR8040S-750MCS	75	±20%	274	1.35	1.50	1.20	1.30
KTNR8040S-820MCS	82	±20%	293	1.30	1.40	1.15	1.20
KTNR8040S-910MCS	91	±20%	354	1.20	1.30	1.05	1.10
KTNR8040S-101MCS	100	±20%	377	1.15	1.25	1.00	1.05
KTNR8040S-121MCS	120	±20%	434	1.05	1.10	0.95	1.00
KTNR8040S-151MCS	150	±20%	533	0.95	1.05	0.85	0.94
KTNR8040S-181MCS	180	±20%	676	0.90	1.0	0.83	0.92
KTNR8040S-221MCS	220	±20%	779	0.85	0.94	0.80	0.88
KTNR8040S-331MCS	330	±20%	1156	0.68	0.75	0.64	0.70
KTNR8040S-471MCS	470	±20%	1625	0.60	0.70	0.50	0.60
KTNR8040S-561MCS	560	±20%	2327	0.55	0.65	0.47	0.54
KTNR8040S-681MCS	680	±20%	2652	0.53	0.60	0.45	0.50
KTNR8040S-821MCS	820	±20%	3640	0.48	0.55	0.35	0.40
KTNR8040S-102MCS	1000	±20%	3640	0.40	0.50	0.35	0.40
KTNR8040S-152MCS	1500	±20%	6500	0.32	0.38	0.26	0.27

All specifications are subject to change without notice.

KTNR8050S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) Max	I sat ③ (A) typ.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A)) typ.
KTNR8050S-1R5MCS	1.5	±20%	12.00	10	12.0	6.00	6.40
KTNR8050S-102MCS	1000	±20%	2520	0.78	0.90	0.32	0.37
KTNR8050S-122KCS	1200	±10%	5400	0.70	0.80	0.30	0.35
KTNR8050S-152KCS	1500	±10%	5010	0.60	0.70	0.29	0.33
KTNR8050S-103MCS*	10000	±20%	22800	0.09	0.10	0.11	0.13

*The test frequency of KTNR8050S-103MCS is 1kHz.

KTNR8060S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ)Max	I sat ③ (A) typ.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A)) typ.
KTNR8060S-681KCS	680	±10%	2170	0.72	0.82	0.46	0.53
KTNR8060S-162KCS	1600	±10%	4500	0.47	0.55	0.33	0.38
KTNR8060S-202KCS	2000	±10%	5800	0.43	0.50	0.28	0.32
KTNR8060S-222KCS	2200	±10%	6880	0.42	0.49	0.26	0.30
KTNR8060S-502KCS	5000	±10%	14900	0.27	0.31	0.18	0.21

KTNR8065S Electrical Characteristics

Part Number	Inductance (uH) ①	Inductance tolerance	DCR ② (mΩ) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR8065S-8R2MCS	8.2	±20%	31	7.0	7.8	4.2	4.8
KTNR8065S-100MCS	10	±20%	44	6.2	7.1	3.5	3.8
KTNR8065S-150MCS	15	±20%	53	5.8	6.7	3.3	3.6
KTNR8065S-220MCS	22	±20%	72	4.3	4.8	2.7	3.1
KTNR8065S-470MCS	47	±20%	152	3.4	4.0	1.85	2.15
KTNR8065S-560MCS	56	±20%	198	3.2	3.7	1.55	1.85
KTNR8065S-680MCS	68	±20%	218	2.7	3.2	1.35	1.6
KTNR8065S-101MCS	100	±20%	280	2.0	2.4	1.25	1.45
KTNR8065S-151MCS	150	±20%	440	1.6	2.0	0.95	1.1
KTNR8065S-221MCS	220	±20%	656	1.25	1.5	0.8	0.9
KTNR8065S-331MCS	330	±20%	840	1.15	1.3	0.75	0.85
KTNR8065S-471MCS	470	±20%	1560	1.0	1.2	0.55	0.65
KTNR8065S-681MCS	680	±20%	1944	0.85	1.0	0.52	0.6
KTNR8065S-102MCS	1000	±20%	2820	0.65	0.73	0.4	0.45
KTNR8065S-152MCS	1500	±20%	4380	0.54	0.6	0.32	0.37
KTNR8065S-222MCS	2200	±20%	6000	0.45	0.5	0.27	0.31
KTNR8065S-332MCS	3300	±20%	8760	0.36	0.4	0.23	0.26
KTNR8065S-472MCS	4700	±20%	14580	0.29	0.33	0.18	0.2
KTNR8065S-682MCS	6800	±20%	22440	0.26	0.29	0.14	0.16
KTNR8065S-103MCS	10000	±20%	27360	0.2	0.23	0.13	0.15

Note:

- ① Inductance tested at 100kHz, 1V using an Agilent/HP 4192A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of it' s initial value.
- ④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.

All specifications are subject to change without notice.

KTNR1050S Electrical Characteristics

Part Number	Inductance (μ H) ①	Inductance tolerance	DCR ② (m Ω) Max.	I sat ③ (A) Max.	I sat ③ (A) typ.	I rms ④ (A) Max.	I rms ④ (A) typ.
KTNR1050S-1R0NCS	1.0	±30%	18	12.5	14	6.3	6.9
KTNR1050S-1R2NCS	1.2	±30%	20	11.5	13.8	5.85	6.3
KTNR1050S-1R5NCS	1.5	±30%	21	9.8	12.5	5.65	6.2
KTNR1050S-2R2NCS	2.2	±30%	25	9.5	12	5.2	5.6
KTNR1050S-3R3NCS	3.3	±30%	27	9.0	11	4.4	4.8
KTNR1050S-4R7NCS	4.7	±30%	30	8.5	10.5	4.0	4.5
KTNR1050S-6R8MCS	6.8	±20%	36	7.5	9.0	3.6	4.0
KTNR1050S-8R2MCS	8.2	±20%	40	6.8	7.8	3.4	3.8
KTNR1050S-100MCS	10	±20%	48	6.2	7.0	3.3	3.6
KTNR1050S-120MCS	12	±20%	53	5.8	6.5	2.8	3.2
KTNR1050S-150MCS	15	±20%	59	5.3	6.0	2.5	2.9
KTNR1050S-180MCS	18	±20%	69	4.5	5.0	2.4	2.7
KTNR1050S-220MCS	22	±20%	85	3.8	4.3	2.3	2.6
KTNR1050S-270MCS	27	±20%	105	3.5	4.0	2.2	2.4
KTNR1050S-330MCS	33	±20%	118	3.1	3.6	2.0	2.2
KTNR1050S-470MCS	47	±20%	160	2.8	3.3	1.75	1.9
KTNR1050S-680MCS	68	±20%	234	2.7	3.2	1.55	1.7
KTNR1050S-101MCS	100	±20%	335	2.15	2.5	1.25	1.4
KTNR1050S-221MCS	220	±20%	675	1.4	1.8	0.9	1.0
KTNR1050S-471MCS	470	±20%	1430	1.15	1.35	0.7	0.75
KTNR1050S-681MCS	680	±20%	1980	0.85	1.0	0.64	0.68
KTNR1050S-102MCS	1000	±20%	3425	0.76	0.85	0.5	0.55

Note:

- ① Inductance tested at 100kHz, 1V using an Agilent/HP 4192A or equivalent.
- ② DCR measured on a micro-ohmmeter.
- ③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.
- ④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.