

Chip Inductor; CIL Series

Ordinary Type



As it has ferrite body and 100 % Ag internal conductor, the CIL series Inductors have excellent Q characteristics and free of cross talk.

General Features

- Magnetic shielding eliminates crosstalk, thus permitting higher mounting density.
- Excellent solderability and high heat resistance for either flow or reflow soldering.
- Monolithic structure for high reliability.

Applications

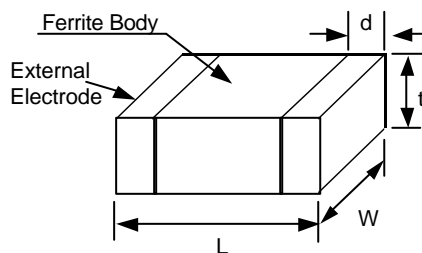
- Resonance circuits, OLL circuits, noise suppression etc.

Part Numbering

CI L 21 O 5R6 K N E
 (1) (2) (3) (4) (5) (6) (7) (8)

- (1) Chip Inductor
- (2) L: Ordinary type
- (3) Dimensions
- (4) Material Code(N, J, Y, S)
- (5) Inductance(R10:0.1μH, 5R6:5.6 μH; 100:10 μH)
- (6) Tolerance(K: ± 10%; M : ± 25%)
- (7) Thickness option(N:Standard, A:Thinner than standard, B: Thicker than standard)
- (8) Package Style(C:paper tape, 7" reel; E: embossed tape, 7" reel)

Dimensions



Unit : mm

SIZE CODE	L	W	t	d
10	1.6 ± 0.15	0.8 ± 0.15	0.8 ± 0.15	0.3 ± 0.2
21	2.0 ± 0.2	1.25 ± 0.2	0.9 ± 0.2	0.5+0.2,-0.3
31	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5+0.2,-0.3

CIL 1608(0603) Type

Part No (1608 type)	Product's thickness (mm)	Inductance (mH)	Q min	L,Q test frequency (MHz)	Self-resonant Frequency (MHz) min.	DC resistance (W),max	Rated Current (mA), max
CIL 10N 47N□	0.80 ± 0.15	0.047 ± 20%,10%	10	50	260	0.30	50
CIL 10N 68N□	0.80 ± 0.15	0.068 ± 20%,10%	10	50	250	0.30	50
CIL 10N 82N□	0.80 ± 0.15	0.082 ± 20%,10%	10	50	245	0.30	50
CIL 10N R10□	0.80 ± 0.15	0.10 ± 20%,10%	15	25	240	0.50	25
CIL 10N R12□	0.80 ± 0.15	0.12 ± 20%,10%	15	25	205	0.50	25
CIL 10N R15□	0.80 ± 0.15	0.15 ± 20%,10%	15	25	180	0.60	25
CIL 10N R18□	0.80 ± 0.15	0.18 ± 20%,10%	15	25	165	0.60	25
CIL 10N R22□	0.80 ± 0.15	0.22 ± 20%,10%	15	25	150	0.80	25
CIL 10N R27□	0.80 ± 0.15	0.27 ± 20%,10%	15	25	136	0.80	25
CIL 10N R33□	0.80 ± 0.15	0.33 ± 20%,10%	15	25	125	0.85	25
CIL 10N R39□	0.80 ± 0.15	0.39 ± 20%,10%	15	25	110	1.00	25
CIL 10N R47□	0.80 ± 0.15	0.47 ± 20%,10%	15	25	105	1.35	25
CIL 10N R56□	0.80 ± 0.15	0.56 ± 20%,10%	15	25	95	1.55	25
CIL 10N R68□	0.80 ± 0.15	0.68 ± 20%,10%	15	25	80	1.70	25
CIL 10N R82□	0.80 ± 0.15	0.82 ± 20%,10%	15	25	75	2.10	25
CIL 10J 1R0□	0.80 ± 0.15	1.0 ± 20%,10%	35	10	70	0.60	10
CIL 10J 1R2□	0.80 ± 0.15	1.2 ± 20%,10%	35	10	60	0.80	10
CIL 10J 1R5□	0.80 ± 0.15	1.5 ± 20%,10%	35	10	55	0.80	10
CIL 10J 1R8□	0.80 ± 0.15	1.8 ± 20%,10%	35	10	50	0.95	10
CIL 10J 2R2□	0.80 ± 0.15	2.2 ± 20%,10%	35	10	45	1.15	10
CIL 10J 2R7□	0.80 ± 0.15	2.7 ± 20%,10%	35	10	40	1.35	10
CIL 10J 3R3□	0.80 ± 0.15	3.3 ± 20%,10%	35	10	38	1.55	10
CIL 10J 3R9□	0.80 ± 0.15	3.9 ± 20%,10%	35	10	36	1.70	10
CIL 10J 4R7□	0.80 ± 0.15	4.7 ± 20%,10%	35	10	33	2.10	10
CIL 10Y 5R6□	0.80 ± 0.15	5.6 ± 20%,10%	35	4	22	1.55	4
CIL 10Y 6R8□	0.80 ± 0.15	6.8 ± 20%,10%	35	4	20	1.70	4
CIL 10Y 8R2□	0.80 ± 0.15	8.2 ± 20%,10%	35	4	18	2.10	4
CIL 10Y 100□	0.80 ± 0.15	10.0 ± 20%,10%	35	2	17	2.55	2
CIL 10Y 120□	0.80 ± 0.15	12.0 ± 20%,10%	35	2	15	2.75	2
CIL 10S 150□	0.80 ± 0.15	15.0 ± 20%	20	1	14	1.70	1
CIL 10S 180□	0.80 ± 0.15	18.0 ± 20%	20	1	13	1.85	1
CIL 10S 220□	0.80 ± 0.15	22.0 ± 20%	20	1	11	2.10	1
CIL 10S 270□	0.80 ± 0.15	27.0 ± 20%	20	1	10	2.75	1
CIL 10S 330□	0.80 ± 0.15	33.0 ± 20%	20	0.4	9	2.95	1

□ : Tolerance (K: ± 10%, M: ± 20%)

* : Test equipment : HP4291A + HP16193A

Part No	Product's thickness [mm]	Inductance [mH]	Q min	L,Q test Frequency [MHz]	Self-Resonant Frequency [MHz], min	DC Resistance [W], max	Rated Current [mA], max
CIL 21N 47N□	0.85 ± 0.2	0.047 ± 20%,10%	15	50	320	0.20	300
CIL 21N 68N□	0.85 ± 0.2	0.068 ± 20%,10%	15	50	280	0.20	300
CIL 21N 82N□	0.85 ± 0.2	0.082 ± 20%,10%	15	50	255	0.20	300
CIL 21N R10□	0.85 ± 0.2	0.10 ± 20%,10%	20	25	235	0.30	250
CIL 21N R12□	0.85 ± 0.2	0.12 ± 20%,10%	20	25	220	0.30	250
CIL 21N R15□	0.85 ± 0.25	0.15 ± 20%,10%	20	25	200	0.40	250
CIL 21N R18□	0.85 ± 0.2	0.18 ± 20%,10%	20	25	185	0.40	250
CIL 21N R22□	0.85 ± 0.2	0.22 ± 20%,10%	20	25	170	0.50	250
CIL 21N R27□	0.85 ± 0.2	0.27 ± 20%,10%	20	25	150	0.50	250
CIL 21N R33□	0.85 ± 0.2	0.33 ± 20%,10%	20	25	145	0.55	250
CIL 21N R39□	0.85 ± 0.2	0.39 ± 20%,10%	25	25	135	0.65	200
CIL 21N R47□	1.25 ± 0.2	0.47 ± 20%,10%	25	25	125	0.65	200
CIL 21N R56□	1.25 ± 0.2	0.56 ± 20%,10%	25	25	115	0.75	150
CIL 21N R68□	1.25 ± 0.2	0.68 ± 20%,10%	25	25	105	0.80	150
CIL 21N R82□	1.25 ± 0.2	0.82 ± 20%,10%	25	25	100	1.00	150
CIL 21J 1R0□	1.25 ± 0.2	1.0 ± 20%,10%	45	10	75	0.40	50
CIL 21J 1R2□	0.85 ± 0.2	1.2 ± 20%,10%	45	10	65	0.50	50
CIL 21J 1R5□	0.85 ± 0.2	1.5 ± 20%,10%	45	10	60	0.50	50
CIL 21J 1R8□	0.85 ± 0.2	1.8 ± 20%,10%	45	10	55	0.60	50
CIL 21J 2R2□	0.85 ± 0.2	2.2 ± 20%,10%	45	10	50	0.65	30
CIL 21J 2R7□	0.85 ± 0.2	2.7 ± 20%,10%	45	10	45	0.75	30
CIL 21J 3R3□	1.25 ± 0.2	3.3 ± 20%,10%	45	10	41	0.80	30
CIL 21J 3R9□	1.25 ± 0.2	3.9 ± 20%,10%	45	10	38	0.90	30
CIL 21J 4R7□	1.25 ± 0.2	4.7 ± 20%,10%	45	10	35	1.00	30
CIL 21Y 5R6□	1.25 ± 0.2	5.6 ± 20%,10%	50	4	32	0.90	15
CIL 21Y 6R8□	1.25 ± 0.2	6.8 ± 20%,10%	50	4	29	1.00	15
CIL 21Y 8R2□	1.25 ± 0.2	8.2 ± 20%,10%	50	4	26	1.10	15
CIL 21Y 100□	1.25 ± 0.2	10.0 ± 20%,10%	50	2	24	1.15	15
CIL 21Y 120□	1.25 ± 0.2	12.0 ± 20%,10%	50	2	22	1.25	15
CIL 21S 150□	1.25 ± 0.2	15.0 ± 20%,10%	30	1	19	0.80	5
CIL 21S 180□	1.25 ± 0.2	18.0 ± 20%,10%	30	1	18	0.90	5
CIL 21S 220□	1.25 ± 0.2	22.0 ± 20%,10%	30	1	16	1.10	5
CIL 21S 270□	1.25 ± 0.2	27.0 ± 20%,10%	30	1	14	1.15	5
CIL 21S 330□	1.25 ± 0.2	33.0 ± 20%,10%	30	0.4	13	1.25	5

□ : Tolerance (K: ± 10%, M: ± 20%)

* : Test equipment : HP4291A + HP16193A

CIL 3216(1206)Type

Part No	Product's thickness [mm]	Inductance [mH]	Q min	L,Q test Frequency [MHz]	Self-Resonant Frequency [MHz] min.	DC Resistance [W] max.	Rated Current [mA] max.
CIL 31N 47N□	0.6 ± 0.2	0.047 ± 20%	20	50	320	0.15	300
CIL 31N 68N□	0.6 ± 0.2	0.068 ± 20%	20	50	280	0.25	300
CIL 31N R10□	0.6 ± 0.2	0.10 ± 20%,10%	20	25	235	0.25	250
CIL 31N R12□	0.6 ± 0.2	0.12 ± 20%,10%	20	25	220	0.30	250
CIL 31N R15□	0.6 ± 0.2	0.15 ± 20%,10%	20	25	200	0.30	250
CIL 31N R18□	0.6 ± 0.2	0.18 ± 20%,10%	20	25	185	0.40	250
CIL 31N R22□	0.6 ± 0.2	0.22 ± 20%,10%	20	25	170	0.40	250
CIL 31N R27□	0.6 ± 0.2	0.27 ± 20%,10%	20	25	150	0.50	250
CIL 31N R33□	0.6 ± 0.2	0.33 ± 20%,10%	20	25	145	0.60	250
CIL 31N R39□	0.85 ± 0.2	0.39 ± 20%,10%	25	25	135	0.50	200
CIL 31N R47□	1.1 ± 0.2	0.47 ± 20%,10%	25	25	125	0.60	200
CIL 31N R56□	1.1 ± 0.2	0.56 ± 20%,10%	25	25	115	0.70	150
CIL 31N R68□	1.1 ± 0.2	0.68 ± 20%,10%	25	25	105	0.80	150
CIL 31N R82□	1.1 ± 0.2	0.82 ± 20%,10%	25	25	100	0.90	150
CIL 31J 1R0□	1.1 ± 0.2	1.0 ± 20%,10%	45	10	75	0.40	100
CIL 31J 1R2□	1.1 ± 0.2	1.2 ± 20%,10%	45	10	65	0.50	100
CIL 31J 1R5□	1.1 ± 0.2	1.5 ± 20%,10%	45	10	60	0.50	50
CIL 31J 1R8□	1.1 ± 0.2	1.8 ± 20%,10%	45	10	55	0.50	50
CIL 31J 2R2□	1.1 ± 0.2	2.2 ± 20%,10%	45	10	50	0.60	50
CIL 31J 2R7□	1.1 ± 0.2	2.7 ± 20%,10%	45	10	45	0.60	50
CIL 31J 3R3□	1.1 ± 0.2	3.3 ± 20%,10%	45	10	41	0.70	50
CIL 31J 3R9□	1.1 ± 0.2	3.9 ± 20%,10%	45	10	38	0.80	50
CIL 31J 4R7□	1.1 ± 0.2	4.7 ± 20%,10%	45	10	35	0.90	50
CIL 31Y 5R6□	1.1 ± 0.2	5.6 ± 20%,10%	50	4	32	0.70	25
CIL 31Y 6R8□	1.1 ± 0.2	6.8 ± 20%,10%	50	4	29	0.80	25
CIL 31Y 8R2□	1.1 ± 0.2	8.2 ± 20%,10%	50	4	26	0.90	25
CIL 31Y 100□	1.1 ± 0.2	10.0 ± 20%,10%	50	2	24	1.00	25
CIL 31Y 120□	1.1 ± 0.2	12.0 ± 20%,10%	50	2	22	1.05	15
CIL 31S 150□	1.1 ± 0.2	15.0 ± 20%,10%	35	1	19	0.70	5
CIL 31S 180□	1.1 ± 0.2	18.0 ± 20%,10%	35	1	18	0.70	5
CIL 31S 220□	1.1 ± 0.2	22.0 ± 20%,10%	35	1	16	0.90	5
CIL 31S 270□	1.1 ± 0.2	27.0 ± 20%,10%	35	1	14	0.90	5
CIL 31S 330□	1.1 ± 0.2	33.0 ± 20%,10%	35	0.4	13	1.05	5

□ : Tolerance (K: ± 10%, M: ± 20%)

* : Test equipment : HP4291A + HP16193A