

Multilayer High Frequency inductor

CIH03T Series (0603/ EIA 0201)



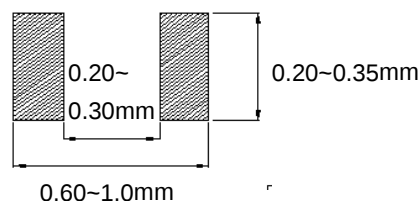
APPLICATION

Mobile communication systems, noise suppression at high frequency and Impedance matching.

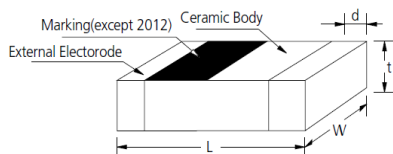
FEATURES

- Lowest value of specific resistance, good property of Q and high SRF.
- Possible to use at range above 100MHz
- Monolithic structure for high reliability.
- Do not contain lead and support lead-free soldering.
- RoHS compliant

RECOMMENDED LAND PATTERN



DIMENSION



Type	Dimension [mm]			
	L	W	t	d
03	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05

DESCRIPTION

Part No.	Inductance (nH)@100MHz	Q (Min.) 100 MHz	Q (typical.)					SRF (MHz) Min	DC resistance (Ω) Max.	Rated current (mA) Max.
			500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH03T1N0□	1.0±0.2nH,0.3nH	4	17	20	28	30	33	13000	0.14	300
CIH03T1N2□	1.2±0.2nH,0.3nH	4	16	20	28	30	33	10000	0.14	250
CIH03T1N3□	1.3±0.2nH,0.3nH	4	16	20	28	30	33	10000	0.14	250
CIH03T1N5□	1.5±0.2nH,0.3nH	4	15	20	27	29	32	10000	0.18	230
CIH03T1N8□	1.8±0.2nH,0.3nH	4	15	20	27	29	31	10000	0.19	200
CIH03T2N0□	2.0±0.2nH,0.3nH	4	15	20	26	28	30	8800	0.22	200
CIH03T2N2□	2.2±0.2nH,0.3nH	4	15	20	26	28	30	8800	0.22	200
CIH03T2N4□	2.4±0.2nH,0.3nH	5	15	20	26	28	30	7500	0.25	200
CIH03T2N7□	2.7±0.2nH,0.3nH	5	15	20	26	28	30	7700	0.25	200
CIH03T3N0□	3.0±0.2nH,0.3nH	5	15	20	26	28	30	7200	0.27	200
CIH03T3N3□	3.3±0.2nH,0.3nH	5	15	20	26	28	30	6700	0.3	200
CIH03T3N6□	3.6±0.2nH,0.3nH	5	15	20	27	29	31	6000	0.3	200
CIH03T3N9□	3.9±0.2nH,0.3nH	5	15	20	27	29	31	6000	0.3	200
CIH03T4N3□	4.3±0.2nH,0.3nH	5	15	19	26	28	30	5600	0.35	200
CIH03T4N7□	4.7±0.2nH,0.3nH	5	15	19	26	28	30	5300	0.4	200
CIH03T5N6□	5.6±0.2nH,0.3nH	5	15	19	26	27	28	4600	0.4	200
CIH03T6N2□	6.2±0.2nH,0.3nH	5	17	18	23	24	25	4100	0.48	150
CIH03T6N8□	6.8±5%	5.5	14	18	23	24	25	4100	0.48	150
CIH03T7N5□	7.5±5%	5	14	18	22	23	23	3700	0.51	150
CIH03T8N2□	8.2±5%	5	14	18	22	23	23	3400	0.55	150
CIH03T10N□	10.0±5%	5	14	17	22	22	21	3300	0.63	150
CIH03T12N□	12.0±5%	6	14	17	21	21	19	3000	0.7	150
CIH03T15N□	15.0±5%	6	13	16	19	18	14	2700	0.8	100
CIH03T18N□	18.0±5%	6	13	17	16	14	9	2100	0.9	100
CIH03T22N□	22.0±5%	5	13	15	14	11	5	1800	1.2	100
CIH03T24N□	24.0±5%	5	13	15	12	9	3	1800	1.6	100
CIH03T27N□	27.0±5%	4	12	14	10	7	2	1800	1.8	50

Part No.	Inductance (nH)@100MHz	Q (Min.) 100 MHz	Q (typical.)					SRF (MHz) Min	DC resistance (Ω) Max.	Rated current (mA) Max.
			500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH03T33N□	33.0±5%	4	12	14	8	5	1	1700	2.1	50
CIH03T39N□	39.0±5%	4	12	13	4	1	-	1500	2.4	50
CIH03T47N□	47.0±5%	4	11	12	2	-	-	1300	2.8	50
CIH03T56N□	56.0±5%	4	11	11	-	-	-	1100	3	50
CIH03T68N□	68.0±5%	5	13	11	-	-	-	1050	3	50
CIH03T82N□	82.0±5%	5	12	8	-	-	-	900	4	50
CIH03TR10□	100.0±5%	5	11	-	-	-	-	770	4.5	50

*Operating temperature range -55 to +125℃

※Tolerance (B :±0.1nH, C :±0.2nH, S :±0.3nH, H :±3%, J :±5%)

※Measurement equipment & Jig : Agilent E4991A+16196C or Equivalent

※ The Rated Current is either the DC value at which the internal Ls value is decreased within 5% with the application of DC Current, or the value of current at which the temperature of the element is increased within 20℃ (Reference ambient temperature:20℃)

※ Residual Inductance of short chip: 0.30nH

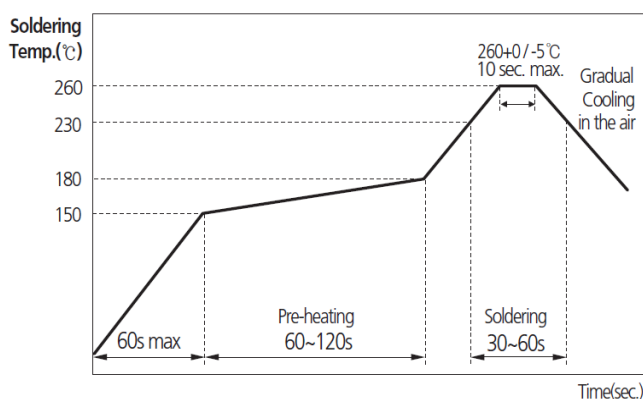
PRODUCT IDENTIFICATION

CI H 03 T 10N J N C
(1) (2) (3) (4) (5) (6) (7) (8)

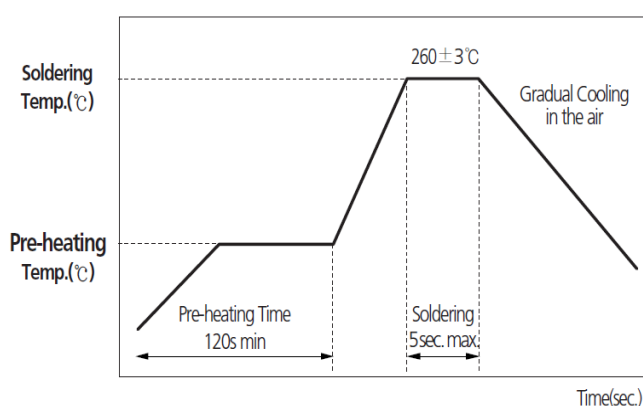
- | | |
|--|--|
| (1) Chip Inductor | (2) H:High frequency type |
| (3) Dimension | (4) Material code(T:Dielectric material) |
| (5) Inductance(4N7:4.7nH, 10N:10nH, R10:100nH) | (6) Tolerance(C:±0.2nH, S:±0.3nH, J:±5%, K:±10%) |
| (7) Thickness option(N:Standard, A:Thinner than standard, B:Thicker than standard) | |
| (8) Packaging(C:paper tape, E:embossed tape) | |

RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



FLOW SOLDERING



PACKAGING

Packaging Style	Quantity(pcs/reel)
Card Board Taping	10,000



Any data in this sheet are subject to change, modify or discontinue without notice.

The data sheets include the typical data for design reference only. If there is any question regarding the data sheets, please contact our sales personnel or application engineers.