

Multilayer High Frequency Inductor

CIH02T Series (0402/ EIA 01005)

APPLICATION

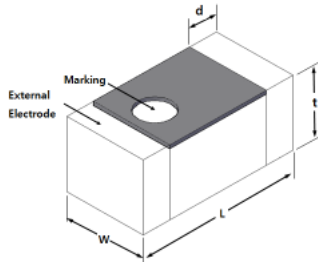
Mobile communication systems, noise suppression at high frequency and Impedance matching.

FEATURES

- High Q value in high frequency range
- Small size(0.4x0.2x0.2)
- Monolithic structure for high reliability
- Do not contain lead and support lead-free soldering.
- RoHS compliant



DIMENSION



Type	Dimension [mm]			
	L	W	t	d
02	0.4±0.02	0.2±0.02	0.2±0.02	0.1±0.04

DESCRIPTION

Part No.	Inductance (nH)@100MHz	Q(Min.) 100MHz	Q Typical Frequency[Hz]					DC Resistance [Ω]max.	Rated current (mA)max.	SRF [GHz] min.
			500M	800M	1.8G	2.0G	2.4G			
CIH02T0N2□	0.2nH±0.1nH,0.2nH	-	11	13	23	24	27	0.1	350	10.0
CIH02T0N3□	0.3nH±0.1nH,0.2nH	-	11	13	23	24	27	0.2	350	10.0
CIH02T0N4□	0.4nH±0.1nH,0.2nH	-	12	14	24	25	29	0.2	350	10.0
CIH02T0N5□	0.5nH±0.1nH,0.2nH	-	12	14	24	25	29	0.2	350	10.0
CIH02T0N6□	0.6nH±0.1nH,0.2nH	-	12	15	26	27	31	0.3	320	10.0
CIH02T0N7□	0.7nH±0.1nH,0.2nH	-	12	15	26	27	31	0.4	320	10.0
CIH02T0N8□	0.8nH±0.1nH,0.2nH	-	12	14	27	28	32	0.4	320	10.0
CIH02T0N9□	0.9nH±0.1nH,0.2nH	-	11	13	22	23	27	0.4	320	10.0
CIH02T1N0□	1.0nH±0.1nH,0.2nH,0.3nH	2	11	13	22	23	27	0.4	250	10.0
CIH02T1N1□	1.1nH±0.1nH,0.2nH,0.3nH	2	11	14	23	24	28	0.5	250	10.0
CIH02T1N2□	1.2nH±0.1nH,0.2nH,0.3nH	2	11	14	24	25	29	0.5	250	10.0
CIH02T1N3□	1.3nH±0.1nH,0.2nH,0.3nH	2	11	14	24	25	29	0.6	250	10.0
CIH02T1N4□	1.4nH±0.1nH,0.2nH,0.3nH	2	10	13	22	23	26	0.6	250	10.0
CIH02T1N5□	1.5nH±0.1nH,0.2nH,0.3nH	2	10	13	22	23	26	0.6	220	10.0
CIH02T1N6□	1.6nH±0.1nH,0.2nH,0.3nH	2	10	13	22	23	26	0.6	220	10.0
CIH02T1N7□	1.7nH±0.1nH,0.2nH,0.3nH	2	10	13	23	24	27	0.6	200	10.0
CIH02T1N8□	1.8nH±0.1nH,0.2nH,0.3nH	2	11	14	23	25	28	0.6	200	10.0
CIH02T1N9□	1.9nH±0.1nH,0.2nH,0.3nH	2	10	14	22	24	26	0.6	200	9.0
CIH02T2N0□	2.0nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	25	0.6	200	9.0

Part No.	Inductance (nH)	Q(Min.) 100MHz	Q Typical Frequency[Hz]					DC Resistance [Ω]max.	Rated current (mA)max.	SRF [GHz] min.
			500M	800M	1.8G	2.0G	2.4G			
CIH02T2N1□	2.1nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	25	0.7	200	8.0
CIH02T2N2□	2.2nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	26	0.8	200	8.0
CIH02T2N3□	2.3nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	25	0.8	200	7.0
CIH02T2N4□	2.4nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	25	0.8	200	7.0
CIH02T2N5□	2.5nH±0.1nH,0.2nH,0.3nH	2	10	13	21	22	25	0.8	200	7.0
CIH02T2N6□	2.6nH±0.1nH,0.2nH,0.3nH	2	11	13	22	23	26	0.8	200	7.0
CIH02T2N7□	2.7nH±0.1nH,0.2nH,0.3nH	2	11	13	22	23	26	0.8	200	7.0
CIH02T2N8□	2.8nH±0.1nH,0.2nH,0.3nH	2	10	13	20	22	24	0.8	200	7.0
CIH02T2N9□	2.9nH±0.1nH,0.2nH,0.3nH	2	10	13	20	21	23	0.8	200	7.0
CIH02T3N0□	3.0nH±0.1nH,0.2nH,0.3nH	2	10	13	20	21	24	0.8	200	7.0
CIH02T3N1□	3.1nH±0.1nH,0.2nH,0.3nH	2	10	13	20	21	24	0.9	200	7.0
CIH02T3N2□	3.2nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	25	1.0	200	7.0
CIH02T3N3□	3.3nH±0.1nH,0.2nH,0.3nH	2	10	13	21	23	25	1.1	180	7.0
CIH02T3N4□	3.4nH±0.1nH,0.2nH,0.3nH	2	10	12	22	24	25	1.1	180	6.5
CIH02T3N5□	3.5nH±0.1nH,0.2nH,0.3nH	2	11	13	22	24	25	1.1	180	6.0
CIH02T3N6□	3.6nH±0.1nH,0.2nH,0.3nH	2	10	14	22	24	26	1.1	180	6.0
CIH02T3N7□	3.7nH±0.1nH,0.2nH,0.3nH	2	10	12	20	22	25	1.1	180	6.0
CIH02T3N8□	3.8nH±0.1nH,0.2nH,0.3nH	2	10	13	20	21	23	1.1	180	6.0
CIH02T3N9□	3.9nH±0.1nH,0.2nH,0.3nH	2	10	12	20	22	23	1.2	180	6.0
CIH02T4N0□	4.0nH±0.1nH,0.2nH,0.3nH	2	10	13	20	21	24	1.2	180	6.0
CIH02T4N3□	4.3nH±0.3nH,3%,5%	2	11	13	21	22	24	1.2	180	6.0
CIH02T4N7□	4.7nH±0.3nH,3%,5%	2	10	13	21	22	25	1.3	160	6.0
CIH02T5N1□	5.1nH±0.3nH,3%,5%	2	11	14	22	23	25	1.4	160	6.0
CIH02T5N6□	5.6nH±0.3nH,3%,5%	2	10	13	20	22	25	1.5	140	6.0
CIH02T6N2□	6.2nH±0.3nH,3%,5%	2	10	14	21	23	23	1.5	140	5.5
CIH02T6N8□	6.8nH±3%,5%	2	11	13	21	22	22	1.6	140	5.5
CIH02T7N5□	7.5nH±3%,5%	2	10	14	21	22	24	1.7	140	5.0
CIH02T8N2□	8.2nH±3%,5%	2	11	14	21	22	24	1.8	140	4.5
CIH02T9N1□	9.1nH±3%,5%	2	11	14	20	21	23	1.8	140	4.0
CIH02T10N□	10nH±3%,5%	3	11	14	21	22	23	2.1	140	4.0
CIH02T12N□	12nH±3%,5%	3	10	13	17	18	19	2.4	140	3.5
CIH02T15N□	15nH±3%,5%	3	11	13	17	18	18	2.6	140	3.0
CIH02T18N□	18nH±3%,5%	3	10	12	17	16	16	2.8	140	2.5

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

※ The Rated Current is the DC current value when the self-generation of heat rises to 20℃
(Reference ambient temperature:20℃)

※ Measurement : E4991A + 16196D

※ Residual Inductance : 0.11nH

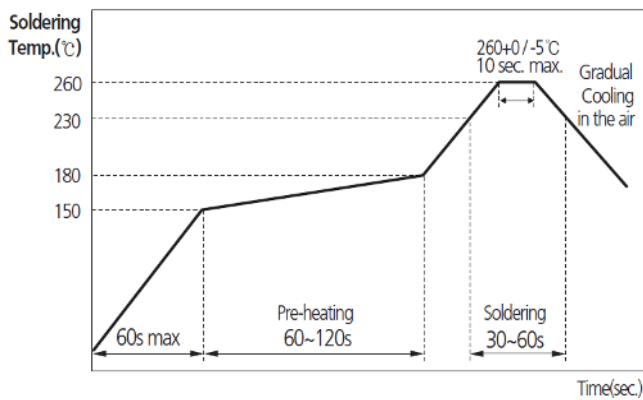
PRODUCT IDENTIFICATION

CI H 02 T 1N0 S N C
(1) (2) (3) (4) (5) (6) (7) (8)

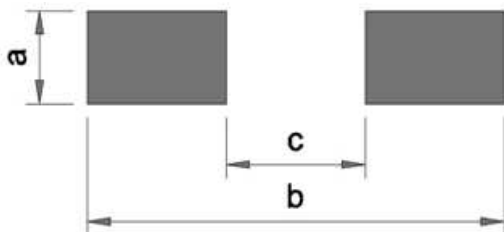
- (1) Chip Inductor
- (2) H:High frequency type
- (3) Dimension
- (4) Material code
- (5) Inductance(1N0:1.0nH, 18N:18nH)
- (6) Tolerance(S:±0.3nH, J:±5%)
- (7) Thickness option(N:Standard, A:Thinner than standard, B:Thicker than standard)
- (8) Packaging(C:paper tape, E:embossed tape)

RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



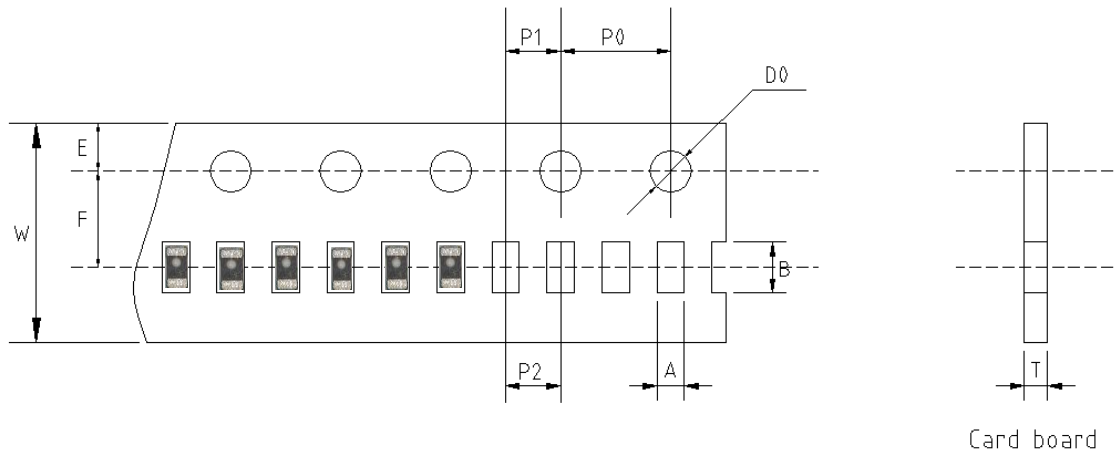
RECOMMENDED LAND PATTERN



Unit : mm

Series	Chip size	a	b	c
CIH02T	0402	0.26	0.54	0.20

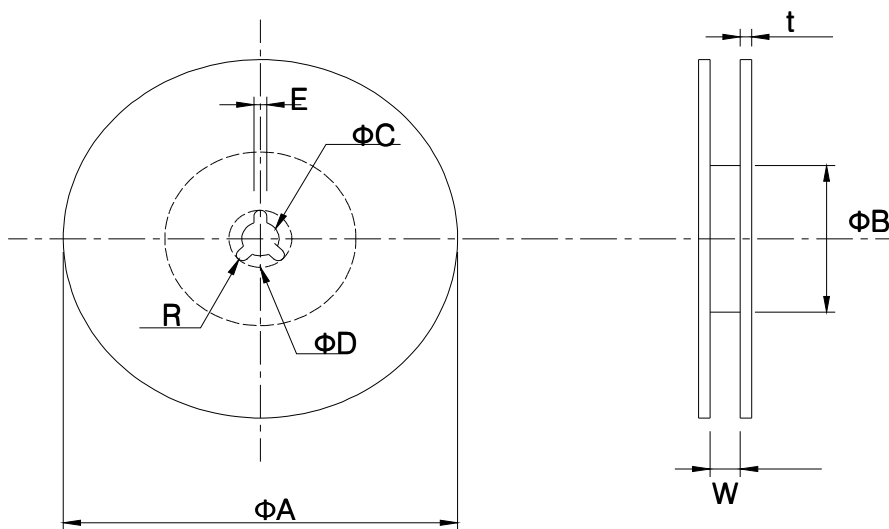
CARD BOARD TAPE CONDITION



Unit : mm

Type	Tape	Chip Thickness	Chip Cavity		T	W	E	F	P ₁	P ₂	P ₀	D ₀	Quantity /Reel (PCS)
			A	B									
0402	Card board	0.2	0.24 ±0.02	0.45 ±0.02	0.31 ±0.03	8.0 ±0.1	1.75 ±0.05	3.5 ±0.05	2.0 ±0.05	2.0 ±0.05	4.0 ±0.05	Φ1.5 +0.1	20,000

REEL CONDITION



Unit : mm

TYPE	A	B	C	D	E	W	t	R
7" REEL	φ180+0/-3	φ60+1/-0	φ13±0.3	25±0.5	2.0±0.5	9±0.5	1.2±0.2	1.0

! 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.