Chip Inductor, CIH Series
High Frequency Type



Feature

- Lowest value of specific resistivity, good property of Q and high SRF.
- Possible to use at range above 100MHz
- Monolithic structure for high reliability.

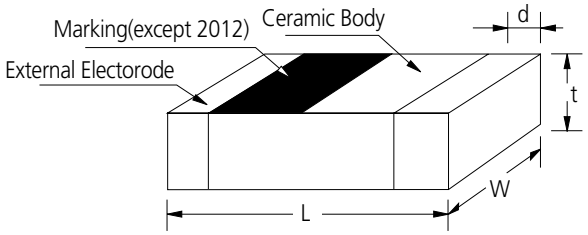
Application

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

CIH Series has dielectric material and 100% Ag as an internal conductor Therefore, it has high Q and |Z| at high frequency. It is possible to use for high frequency over 100MHz.

Operating Temp	-55~+125℃
Storage Temp	-10~+40℃

Dimensions



Unit : mm

SIZE CODE	L	W	t	d
03	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05
05	1.0±0.05	0.5±0.05	0.5±0.05	0.25±0.1
10	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

Part Numbering

CI	H	03	T	12N	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)

CIH 0603(0201) Type

Part No.	Inductance (nH)	Q (Min.) 100 MHz	Q (typical) Frequency					SRF-Resonant Frequency (MHz)	DC resistance (Ω)	Rated current (mA) Max.
			500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	min	max	
CIH 03T 1N0 □	1.0±0.2nH, 0.3nH	4	17	20	28	30	33	13000	0.14	300
CIH 03T 1N2 □	1.2±0.2nH, 0.3nH	4	16	20	28	30	33	10000	0.14	250
CIH 03T 1N5 □	1.5±0.2nH, 0.3nH	4	15	20	27	29	32	10000	0.18	230
CIH 03T 1N8 □	1.8±0.2nH, 0.3nH	4	15	20	27	29	31	10000	0.19	200
CIH 03T 2N2 □	2.2±0.2nH, 0.3nH	4	15	20	26	28	30	8800	0.22	200
CIH 03T 2N7 □	2.7±0.2nH, 0.3nH	5	15	20	26	28	30	7700	0.25	200
CIH 03T 3N3 □	3.3±0.2nH, 0.3nH	5	15	20	26	28	30	6700	0.30	200
CIH 03T 3N9 □	3.9±0.2nH, 0.3nH	5	15	20	27	29	31	6000	0.30	200
CIH 03T 4N7 □	4.7±0.2nH, 0.3nH	5	15	19	26	28	30	5300	0.40	200
CIH 03T 5N6 □	5.6±0.2nH, 0.3nH	5	15	19	26	27	28	4600	0.40	200
CIH 03T 6N8 □	6.8±5%	5.5	14	18	23	24	25	4100	0.48	150
CIH 03T 8N2 □	8.2±5%	5	14	18	22	23	23	3400	0.55	150
CIH 03T 10N □	10.0±5%	5	14	17	22	22	21	3300	0.63	150
CIH 03T 12N □	12.0±5%	6	14	17	21	21	19	3000	0.70	150
CIH 03T 15N □	15.0±5%	6	13	16	19	18	14	2700	0.80	100
CIH 03T 18N □	18.0±5%	6	13	17	16	14	9	2100	0.90	100
CIH 03T 22N □	22.0±5%	5	13	15	14	11	5	1800	1.2	100
CIH 03T 27N □	27.0±5%	4	12	14	10	7	2	1800	1.8	50
CIH 03T 33N □	33.0±5%	4	12	14	8	5	1	1700	2.1	50
CIH 03T 39N □	39.0±5%	4	12	13	4	1	-	1500	2.4	50
CIH 03T 47N □	47.0±5%	4	11	12	2	-	-	1300	2.8	50
CIH 03T 56N □	56.0±5%	4	11	11	-	-	-	1100	3.0	50

□ : Tolerance (C : ±0.2nH, S : ±0.3nH, J:±5%)
※ Test equipment : Agilent E4991A+16196C

CIH 1005(0402) Type

Part No.	Inductance (nH) @100MHz	Q (Min) 100Mhz	Q (typical.)					SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
			500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 05T 1N0 S	1.0±0.3nH	8	23	29	48	50	56	10000	0.12	300
CIH 05T 1N2 S	1.2±0.3nH	8	23	29	48	50	56	10000	0.12	300
CIH 05T 1N5 S	1.5±0.3nH	8	23	29	47	50	56	6000	0.13	300
CIH 05T 1N8 S	1.8±0.3nH	8	20	26	41	43	49	6000	0.14	300
CIH 05T 2N2 S	2.2±0.3nH	8	22	27	44	47	52	6000	0.16	300
CIH 05T 2N4 S	2.4±0.3nH	8	22	27	44	47	52	6000	0.16	300
CIH 05T 2N7 S	2.7±0.3nH	8	22	27	43	45	50	6000	0.17	300
CIH 05T 3N0 □	3.0±10%, 0.3nH	8	24	30	46	48	53	6000	0.19	300
CIH 05T 3N3 □	3.3±10%, 0.3nH	8	24	30	46	48	53	6000	0.19	300
CIH 05T 3N6 □	3.6±10%, 0.3nH	8	24	30	46	48	53	6000	0.19	300
CIH 05T 3N9 □	3.9±10%, 0.3nH	8	22	28	43	45	50	4000	0.22	300
CIH 05T 4N7 □	4.7±10%, 0.3nH	8	23	30	45	47	50	4000	0.24	300
CIH 05T 5N1 □	5.1±10%, 0.3nH	8	22	28	42	43	45	4000	0.27	300
CIH 05T 5N6 □	5.6±10%, 0.3nH	8	22	28	42	43	45	4000	0.27	300
CIH 05T 6N8 □	6.8±5%, 10%	8	22	28	40	41	41	3900	0.32	300
CIH 05T 7N5 □	7.5±5%, 10%	8	22	28	38	38	36	3600	0.37	300
CIH 05T 8N2 □	8.2±5%, 10%	8	22	28	38	38	36	3600	0.37	300
CIH 05T 10N □	10.0±5%, 10%	8	22	28	37	36	31	3200	0.42	300
CIH 05T 12N □	12.0±5%, 10%	8	22	28	33	31	23	2700	0.50	300
CIH 05T 15N □	15.0±5%, 10%	8	22	28	29	26	17	2300	0.55	300
CIH 05T 18N □	18.0±5%, 10%	8	23	28	26	22	11	2100	0.65	250
CIH 05T 22N □	22.0±5%, 10%	8	22	27	21	14	2	1900	0.80	250
CIH 05T 27N □	27.0±5%, 10%	8	20	23	10	3	-	1600	0.90	250
CIH 05T 33N □	33.0±5%, 10%	8	20	23	3	-	-	1300	1.00	250
CIH 05T 39N □	39.0±5%, 10%	8	20	21	-	-	-	1200	1.20	200
CIH 05T 47N □	47.0±5%, 10%	8	19	20	-	-	-	1000	1.30	200
CIH 05T 56N □	56.0±5%, 10%	8	19	18	-	-	-	750	1.40	180
CIH 05T 68N □	68.0±5%, 10%	8	17	15	-	-	-	750	1.40	180
CIH 05T 82N □	82.0±5%, 10%	8	16	11	-	-	-	600	1.60	150
CIH 05T R10 □	100.0±5%, 10%	8	15	9	-	-	-	600	1.60	130

□ : Tolerance (S : ±0.3nH, J : ±5%, K:±10%)
※Test equipment : Agilent 4291B+16192A

CIH 1608(0603) Type

Part No.	Inductance (nH) @100MHz	Q (typical)		SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
		100MHz	800MHz			
CIH 10T 1N0 S	1.0±0.3nH	8	20	10000	0.05	800
CIH 10T 1N2 S	1.2±0.3nH	8	20	10000	0.05	800
CIH 10T 1N5 S	1.5±0.3nH	8	20	6000	0.10	800
CIH 10T 1N8 S	1.8±0.3nH	8	20	6000	0.10	800
CIH 10T 2N2 S	2.2±0.3nH	8	20	6000	0.10	800
CIH 10T 2N7 S	2.7±0.3nH	10	25	6000	0.10	800
CIH 10T 3N3□	3.3±0.3nH,10%	10	25	6000	0.12	800
CIH 10T 3N9□	3.9±0.3nH,10%	10	27	6000	0.14	800
CIH 10T 4N7□	4.7±0.3nH,10%	10	27	4000	0.16	800
CIH 10T 5N6□	5.6±0.3nH,10%	10	27	4000	0.18	800
CIH 10T 6N8□	6.8±10%, 5%	10	27	4000	0.22	700
CIH 10T 8N2□	8.2±10%, 5%	10	26	3500	0.24	700
CIH 10T 10N□	10.0±10%, 5%	12	26	3400	0.26	600
CIH 10T 12N□	12.0±10%, 5%	12	24	2600	0.28	600
CIH 10T 15N□	15.0±10%, 5%	12	24	2300	0.32	500
CIH 10T 18N□	18.0±10%, 5%	12	24	2000	0.35	500
CIH 10T 22N□	22.0±10%, 5%	12	25	1600	0.40	500
CIH 10T 27N□	27.0±10%, 5%	12	25	1400	0.45	500
CIH 10T 33N□	33.0±10%, 5%	12	24	1200	0.55	500
CIH 10T 39N□	39.0±10%, 5%	12	20	1100	0.60	400
CIH 10T 47N□	47.0±10%, 5%	12	20	900	0.77	400
CIH 10T 56N□	56.0±10%, 5%	12	20	900	0.75	400
CIH 10T 68N□	68.0±10%, 5%	12	(1)20	700	0.85	350
CIH 10T 82N□	82.0±10%, 5%	12	(1)20	600	0.95	350
CIH 10T R10□	100.0±10%, 5%	12	(1)20	600	1.00	350
CIH 10T R12□	120.0±10%, 5%	(2)8	-	500	1.20	300
CIH 10T R15□	150.0±10%, 5%	(2)8	-	500	1.20	250
CIH 10T R18□	180.0±10%, 5%	(2)8	-	400	1.30	250
CIH 10T R22□	220.0±10%, 5%	(2)8	-	400	1.50	200
CIH 10T R27□	270.0±10%, 5%	(2)8	-	400	1.50	200

□ : Tolerance (S : ±0.3nH, J : ±5%, K:±10%)
※ Test equipment : Agilent 4291B+16192A

(1) 500MHz, (2) 50MHz,