

Multilayer High Frequency inductor

CIH05Q Series (1005 / EIA 0402)



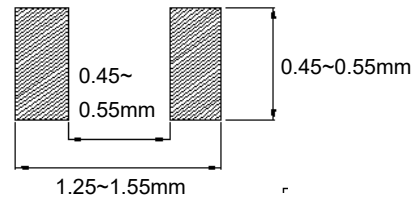
APPLICATION

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

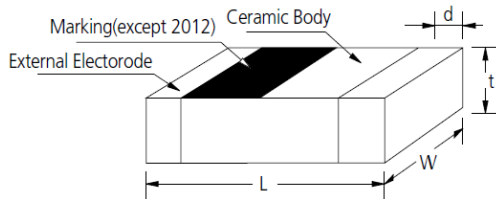
FEATURES

- Lowest value of specific resistivity, good property of Q and high SRF
- Low DC Resistance
- 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
05	1.0±0.05	0.5±0.05	0.5±0.05	0.25±0.1

DESCRIPTION

Part No.	Inductance (nH) @100MHz	Q (min) 100MHz	Q (typical.)					SRF (MHz) Min	DC resistance (Ω) Max.	Rated current (mA) Max.
			500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
CIH05Q1N0SNC	1.0nH±0.3nH	8	23	34	51	54	57	10000	0.07	1000
CIH05Q1N2SNC	1.2nH±0.3nH	8	23	36	56	58	60	6000	0.09	1000
CIH05Q1N5SNC	1.5nH±0.3nH	8	23	34	50	53	55	6000	0.1	1000
CIH05Q1N8SNC	1.8nH±0.3nH	8	20	33	48	49	50	6000	0.1	900
CIH05Q2N2SNC	2.2nH±0.3nH	8	22	34	48	49	50	6000	0.12	900
CIH05Q2N4SNC	2.4nH±0.3nH	8	22	34	51	52	52	6000	0.15	800
CIH05Q2N7SNC	2.7nH±0.3nH	8	22	33	49	50	50	6000	0.15	800
CIH05Q3N0SNC	3.0nH±0.3nH	8	24	34	49	51	50	6000	0.17	800
CIH05Q3N3SNC	3.3nH±0.3nH	8	24	33	46	47	46	6000	0.17	800
CIH05Q3N6SNC	3.6nH±0.3nH	8	24	33	45	47	46	6000	0.18	700
CIH05Q3N9SNC	3.9nH±0.3nH	8	22	33	49	47	46	6000	0.18	700
CIH05Q4N3SNC	4.3nH±0.3nH	8	22	33	44	45	44	6000	0.18	700
CIH05Q4N7SNC	4.7nH±0.3nH	8	23	33	42	43	42	6000	0.18	700
CIH05Q5N1SNC	5.1nH±0.3nH	8	22	33	44	45	42	5300	0.2	600
CIH05Q5N6SNC	5.6nH±0.3nH	8	22	32	41	40	38	4500	0.2	600
CIH05Q6N2SNC	6.2nH±0.3nH	8	22	31	41	41	38	4500	0.22	600
CIH05Q6N8JNC	6.8nH±5%	8	22	30	40	40	37	4500	0.24	600
CIH05Q7N5JNC	7.5nH±5%	8	22	29	38	37	34	4200	0.24	500

CIH05Q8N2JNC	8.2nH±5%	8	22	29	35	34	29	3700	0.24	500
CIH05Q9N1JNC	9.1nH±5%	8	22	29	36	35	31	3400	0.26	500
CIH05Q10NJNC	10nH±5%	8	22	29	35	33	28	3400	0.26	500
CIH05Q12NJNC	12nH±5%	8	22	27	28	24	18	3000	0.28	400
CIH05Q15NJNC	15nH±5%	8	22	27	25	21	13	2500	0.32	400
CIH05Q18NJNC	18nH±5%	8	23	25	22	18	-	2200	0.36	350
CIH05Q22NJNC	22nH±5%	8	22	24	16	-	-	1900	0.42	350
CIH05Q27NJNC	27nH±5%	8	20	21	-	-	-	1700	0.46	300
CIH05Q33NJNC	33nH±5%	8	20	20	-	-	-	1600	0.58	300
CIH05Q39NJNC	39nH±5%	8	20	18	-	-	-	1200	0.65	250
CIH05Q47NJNC	47nH±5%	8	19	16	-	-	-	1000	0.72	250
CIH05Q56NJNC	56nH±5%	8	19	13	-	-	-	800	0.82	200
CIH05Q68NJNC	68nH±5%	8	17	10	-	-	-	800	0.92	200
CIH05Q82NJNC	82nH±5%	8	16	6	-	-	-	700	1.2	200
CIH05Q91NJNC	91nH±5%	8	-	-	-	-	-	600	1.32	200
CIH05QR10JNC	100nH±5%	8	-	-	-	-	-	600	1.35	200
CIH05QR12JNC	120nH±5%	8	-	-	-	-	-	600	2.00	150
CIH05QR15JNC	150nH±5%	8	-	-	-	-	-	550	2.99	150
CIH05QR18JNC	180nH±5%	8	-	-	-	-	-	500	3.38	150
CIH05QR22JNC	220nH±5%	8	-	-	-	-	-	450	3.77	120
CIH05QR27JNC	270nH±5%	8	-	-	-	-	-	400	4.94	110

*Operating temperature range -55 to +125°C

※Tolerance (C: 0.2nH, S: 0.3nH, J: ±5%)

※Measurement equipment &Jig

- Impedance Measuring equipment &Jig : Agilent E4991A + 16192A Test Fixture or Equivalent

- Resistance Measuring equipment &Jig : Agilent 4338B + 16089A Large Kelvin Clip Leads 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°C

(Reference ambient temperature:20°C)

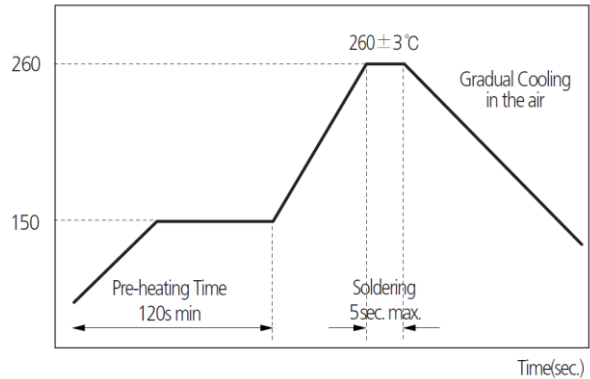
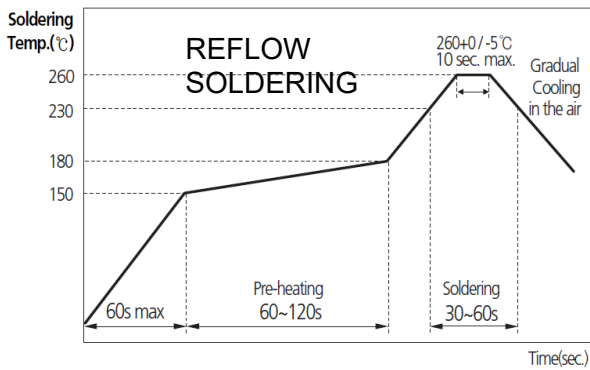
PRODUCT IDENTIFICATION

ex)

CI H 05 Q R12 J N C
(1) (2) (3) (4) (5) (6) (7) (8)

- (1) Chip Inductor
- (2) H: High frequency type
- (3) Dimension
- (4) Material code (Q:Dielectric material High Q type, Low RDC)
- (5) Inductance (2N7: 2.7nH, 10N: 10nH, R12: 120nH)
- (6) Tolerance (C: 0.2nH, 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



PACKAGING

Packaging Type	Quantity(pcs/reel)
Card Board Type	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.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Samsung Electro-Mechanics\(三星电机\)](#)