

# Multilayer High Frequency inductor

# CIH10T Series (1608/ EIA 0603)

#### APPLICATION

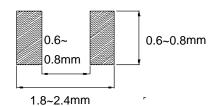
Mobile communication systems, noise suppression at high frequency and Impedance matching.

### **FEATURES**

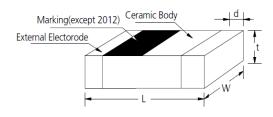
- Lowest value of specific resistivity, good property of Q and high SRF.
- Possible to use at range above 100MHz
- Monolithic structure for high reliability.
- Do not contain lead and support lead-free soldering.
- · RoHS compliant



#### RECOMMENDED LAND PATTERN



#### DIMENSION



Type	Dimension [mm]				
Type	L	W	t	d	
10	1.6±0.15	0.8±0.15	0.8±0.15.	0.3±0.2	

#### **DESCRIPTION**

	Inductance	Q (typical.)		SRF	DC	Rated
Part No.	(nH) @100MHz	100MHz	800MHz	(MHz) Min	resistance (Ω) Max.	current (mA) Max.
CIH10T1N0 S		8	20	10000	<b>'</b> '	800
	1.0±0.3nH	_			0.05	
CIH10T1N2 S	1.2±0.3nH	8	20	10000	0.05	800
CIH10T1N5 S	1.5±0.3nH	8	20	6000	0.1	800
CIH10T1N8 S	1.8±0.3nH	8	20	6000	0.1	800
CIH10T2N2 S	2.2±0.3nH	8	20	6000	0.1	800
CIH10T2N7 S	2.7±0.3nH	10	25	6000	0.1	800
CIH10T3N3 □	3.3±0.3nH,10%	10	25	6000	0.12	800
CIH10T3N9 □	3.9±0.3nH,10%	10	27	6000	0.14	800
CIH10T4N7 □	4.7±0.3nH,10%	10	27	4000	0.16	800
CIH10T5N6 □	5.6±0.3nH,10%	10	27	4000	0.18	800
CIH10T6N8 □	6.8±10%, 5%	10	27	4000	0.22	700
CIH10T8N2 □	8.2±10%, 5%	10	26	3500	0.24	700
CIH10T10N □	10.0±10%, 5%	12	26	3400	0.26	600
CIH10T12N □	12.0±10%, 5%	12	24	2600	0.28	600
CIH10T15N □	15.0±10%, 5%	12	24	2300	0.32	500
CIH10T18N □	18.0±10%, 5%	12	24	2000	0.35	500
CIH10T22N □	22.0±10%, 5%	12	25	1600	0.4	500
CIH10T27N □	27.0±10%, 5%	12	25	1400	0.45	500
CIH10T33N □	33.0±10%, 5%	12	24	1200	0.55	500
CIH10T39N □	39.0±10%, 5%	12	20	1100	0.6	400
CIH10T47N □	47.0±10%, 5%	12	20	900	0.77	400
CIH10T56N □	56.0±10%, 5%	12	20	900	0.75	400



	Inductance	Q (typical.)		SRF	DC	Rated
Part No.	(nH)	100MHz	800MHz	(MHz)	resistance	current
	@100MHz	10011112		Min	(Ω) Max.	(mA) Max.
CIH10T68N □	68.0±10%, 5%	12	(1)20	700	0.85	350
CIH10T82N □	82.0±10%, 5%	12	(1)20	600	0.95	350
CIH10TR10	100.0±10%, 5%	12	(1)20	600	1	350
CIH10TR12 □	120.0±10%, 5%	(2)8	-	500	1.2	300
CIH10TR15	150.0±10%, 5%	(2)8	-	500	1.2	250
CIH10TR18	180.0±10%, 5%	(2)8	-	400	1.3	250
CIH10TR22 □	220.0±10%, 5%	(2)8	-	400	1.5	200
CIH10TR27 □	270.0±10%, 5%	(2)8	-	400	1.5	200

<sup>(1) 500</sup>MHz, (2) 50MHz,

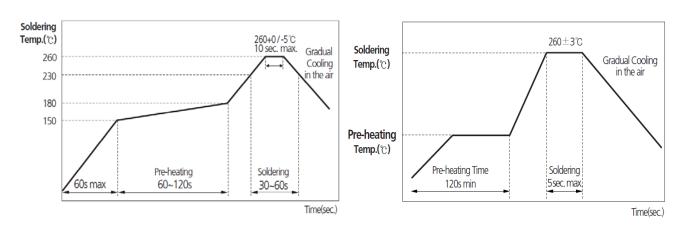
- %Tolerance (B :±0.1nH, C :±0.2nH, S :±0.3nH, H :±3%, J :±5%, K :±10%)
- \*Measurement equipment & Jig: HP4291B+16092A or Equivalent
- \* The Rated Current is either the DC value at witch the internal Ls value is decreased within 5% with the application of DC\_Current, or the value of current at which the temperature of the element is increased within  $20\,^{\circ}$ C (Reference ambient temperature:20°C)

10N (3) (6) (1) **(2)** (5)

- (1) Chip Inductor
- (3) Dimension
- (5) Inductance(4N7:4.7nH, 10N:10nH, R10:100nH)
- (2) H:High frequency type
- (4) Material code(T:Dielectric material)
- (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)

## **REFLOW SOLDERING**

## FLOW SOLDERING



### **PACKAGING**

Packaging Style	Quantity(pcs/reel)
Card Board Taping	4000

■ NOTICE :All specifications are subject to change without previous notice. Please contact with product representatives or engineers to check specifications.

<sup>\*</sup>Operating temperature range -55 to +125°C