

# Multilayer High Frequency inductor

## CIH 03U Series (0603 / EIA 0201)



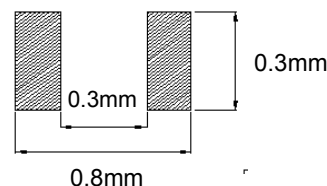
### APPLICATION

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

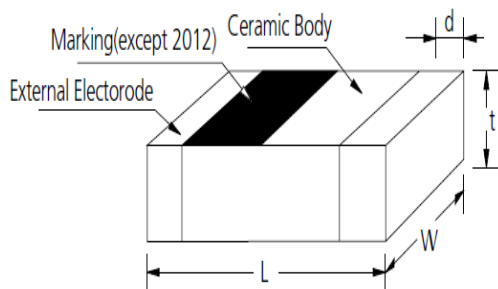
### FEATURES

- High Q value in high frequency range
- Low DC Resistance
- Small size (0.6×0.3×0.3)
- 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	0.1±0.05

### DESCRIPTION

Part No.	Inductance (nH) @500MHz	Q (min) @500MHz	Q (typical.)					SRF (MHz) Min	DC resis tance (Ω) Max.	Rated current (mA) Max.
			500 MHz	800 MHz	1.8 GHz	2.0 GHz	2.4 GHz			
CIH03U0N6□	0.6±0.1nH,0.2nH,0.3nH	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH03U0N7□	0.7±0.1nH,0.2nH,0.3nH	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH03U0N8□	0.8±0.1nH,0.2nH,0.3nH	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH03U0N9□	0.9±0.1nH,0.2nH,0.3nH	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH03U1N0□	1.0±0.1nH,0.2nH,0.3nH	15	24	31	53	56	64	>10000	0.07	1000
CIH03U1N1□	1.1±0.1nH,0.2nH,0.3nH	15	24	31	53	56	64	>10000	0.07	1000
CIH03U1N2□	1.2±0.1nH,0.2nH,0.3nH	15	22	27	50	55	59	>10000	0.1	800
CIH03U1N3□	1.3±0.1nH,0.2nH,0.3nH	15	22	27	50	55	59	>10000	0.1	800
CIH03U1N4□	1.4±0.1nH,0.2nH,0.3nH	15	21	24	39	41	47	>10000	0.1	800
CIH03U1N5□	1.5±0.1nH,0.2nH,0.3nH	15	21	24	39	41	46	>10000	0.1	800

CIH03U1N6□	1.6±0.1nH,0.2nH,0.3nH	14	19	24	39	41	46	>10000	0.15	800
CIH03U1N7□	1.7±0.1nH,0.2nH,0.3nH	14	19	24	39	41	46	>10000	0.15	800
CIH03U1N8□	1.8±0.1nH,0.2nH,0.3nH	14	18	24	39	41	46	>10000	0.15	800
CIH03U1N9□	1.9±0.1nH,0.2nH,0.3nH	14	18	24	37	41	45	>10000	0.15	800
CIH03U2N0□	2.0±0.1nH,0.2nH,0.3nH	14	19	23	37	41	45	>10000	0.15	800
CIH03U2N1□	2.1±0.1nH,0.2nH,0.3nH	15	21	24	37	39	44	>10000	0.15	700
CIH03U2N2□	2.2±0.1nH,0.2nH,0.3nH	15	21	24	37	39	43	>10000	0.15	700
CIH03U2N3□	2.3±0.1nH,0.2nH,0.3nH	15	20	24	36	38	43	>10000	0.18	700
CIH03U2N4□	2.4±0.1nH,0.2nH,0.3nH	15	20	24	36	38	42	>10000	0.18	700
CIH03U2N5□	2.5±0.1nH,0.2nH,0.3nH	15	20	24	36	38	42	>10000	0.20	600
CIH03U2N6□	2.6±0.1nH,0.2nH,0.3nH	14	19	22	35	36	40	>10000	0.20	600
CIH03U2N7□	2.7±0.1nH,0.2nH,0.3nH	14	19	22	35	36	40	>10000	0.25	600
CIH03U2N8□	2.8±0.1nH,0.2nH,0.3nH	14	19	22	35	36	40	9500	0.25	600
CIH03U2N9□	2.9±0.1nH,0.2nH,0.3nH	14	19	22	35	36	40	9500	0.25	600
CIH03U3N0□	3.0±0.1nH,0.2nH,0.3nH	14	19	22	35	39	43	9000	0.25	500
CIH03U3N1□	3.1±0.1nH,0.2nH,0.3nH	14	17	22	33	39	43	9000	0.25	500
CIH03U3N2□	3.2±0.1nH,0.2nH,0.3nH	14	18	22	34	35	39	9000	0.25	500
CIH03U3N3□	3.3±0.1nH,0.2nH,0.3nH	14	18	22	33	35	39	9000	0.25	500
CIH03U3N4□	3.4±0.1nH,0.2nH,0.3nH	14	18	23	34	35	39	8700	0.25	500
CIH03U3N5□	3.5±0.1nH,0.2nH,0.3nH	14	18	23	34	35	38	8700	0.25	500
CIH03U3N6□	3.6±0.1nH,0.2nH,0.3nH	14	18	23	33	35	39	8500	0.25	450
CIH03U3N7□	3.7±0.1nH,0.2nH,0.3nH	14	18	23	34	35	38	8500	0.25	450
CIH03U3N8□	3.8±0.1nH,0.2nH,0.3nH	14	18	22	33	35	38	8000	0.25	450
CIH03U3N9□	3.9±0.1nH,0.2nH,0.3nH	14	18	22	33	35	38	8000	0.25	450
CIH03U4N3□	4.3±3%, 5%, 0.3nH	14	18	22	32	34	37	7000	0.35	400
CIH03U4N7□	4.7±3%, 5%, 0.3nH	14	18	22	31	32	34	7000	0.35	400
CIH03U5N1□	5.1±3%, 5%, 0.3nH	14	18	22	32	34	37	6000	0.35	400
CIH03U5N6□	5.6±3%, 5%, 0.3nH	14	18	22	32	34	37	6000	0.35	400
CIH03U6N2□	6.2±3%, 5%, 0.3nH	14	18	22	32	33	36	5500	0.40	350
CIH03U6N8□	6.8±3%,5%	14	18	22	31	32	35	5500	0.40	350
CIH03U7N5□	7.5±3%,5%	14	18	22	30	32	34	5000	0.50	350
CIH03U8N2□	8.2±3%,5%	14	18	22	30	31	33	5000	0.50	350

CIH03U9N1□	9.1±3%,5%	14	18	22	30	31	32	4500	0.60	350
CIH03U10N□	10.0±3%,5%	14	18	22	28	29	31	4500	0.60	350
CIH03U12N□	12.0±3%,5%	14	18	22	28	28	27	4000	0.70	180
CIH03U15N□	15.0±3%,5%	14	18	22	27	26	24	3500	0.85	170
CIH03U18N□	18.0±3%,5%	14	18	22	25	24	21	3100	1.00	160
CIH03U22N□	22.0±3%,5%	14	18	21	22	22	19	2300	1.15	150
CIH03U27N□	27.0±5%	14	18	21	18	15	-	2200	1.90	140
CIH03U33N□	<sup>(2)</sup> 33.0±5%	<sup>(2)</sup> 10	16	17	11	-	-	1800	2.00	140
CIH03U39N□	<sup>(2)</sup> 39.0±5%	<sup>(2)</sup> 10	15	17	-	-	-	1800	2.10	130
CIH03U47N□	<sup>(2)</sup> 47.0±5%	<sup>(2)</sup> 10	16	17	-	-	-	1600	2.60	120
CIH03U56N□	<sup>(2)</sup> 56.0±5%	<sup>(2)</sup> 10	15	15	-	-	-	1400	3.30	110
CIH03U68N□	<sup>(2)</sup> 68.0±5%	<sup>(2)</sup> 9	15	15	-	-	-	1200	3.30	110
CIH03U82N□	<sup>(2)</sup> 82.0±5%	<sup>(2)</sup> 9	15	14	-	-	-	1200	3.80	100
CIH03UR10□	<sup>(2)</sup> 100.0±5%	<sup>(2)</sup> 9	14	12	-	-	-	900	4.30	90

□ : B=±0.1nH, C=±0.2nH, S=±0.3nH, H=±3%, J=±5%

Frequency <sup>(2)</sup>: 300MHz )

\*Operating temperature range -55 to +125°C

※Measurement equipment & Jig

- Inductance Measuring equipment & Jig : Agilent E4991A + 16197A Bottom Electrode SMD 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 with 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)

※ Residual Inductance of short chip: 0.43nH

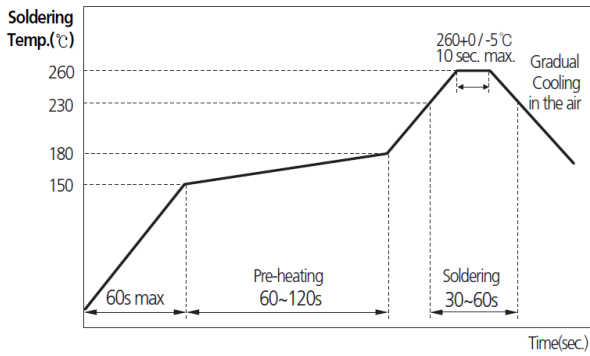
**PRODUCT IDENTIFICATION**

**CI H 03 U 1N8 S N C**  
**(1) (2) (3) (4) (5) (6) (7) (8)**

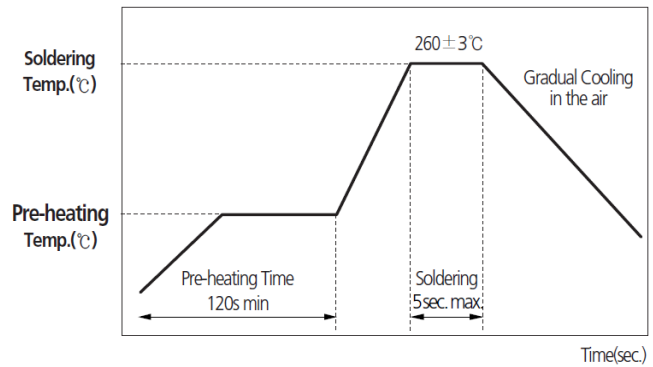
- (1) Chip Inductor
- (2) H: High frequency type
- (3) Dimension
- (4) Material code (U:Dielectric material High Q type, Low RDC)
- (5) Inductance (0N6: 0.6nH, 1N8: 1.8nH, 10N: 10nH)
- (6) Tolerance (B: ±0.1nH, C: ±0.2nH, S: ±0.3nH, H: ±3%, J: ±5%)
- (7) Thickness option (N: Standard, A: Thinner than standard, B: Thicker than standard)
- (8) Packaging (C: paper tape, E: embossed tape)

**RECOMMENDED SOLDERING CONDITION**

**REFLOW SOLDERING**



**FLOW SOLDERING**



**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

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