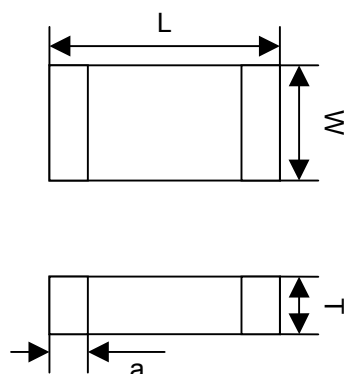




### Multilayer Chip High Frequency Inductor (SDHL Series)

#### • Dimension



Type	L	W	T	A
SDHL1005 [0402]	1.0±0.15 [.039±.006]	0.5±0.15 [.020±.006]	0.5±0.15 [.020±.006]	0.25±0.10 [.010±.004]
SDCH1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]

Unit: mm [inch]

Unit: mm

#### • Features

- Monolithic structure for high reliability
- Higher self-resonant frequency than SDCL Series
- Excellent solderability and heat resistance for reflow and wave soldering processes
- Ultra miniaturized size and light weight
- No polarity
- Operating temperature:  
SDHL1005 Series: -55°C to +125°C  
SDHL1608 Series: -40°C to +85°C

#### • Applications

- Bluetooth® modules
- Phones for CDMA, TD-CDMA, GSM, PCS
- RF modules in telecommunication equipment
- Power AMP modules
- Computers

#### • Part Number Identification

**SDHL**    **1005**    **C**    **10N**    **J**    **T**    **F**  
 (1)            (2)            (3)            (4)            (5)            (6)            (7)

(1)

Product ID	
SDHL	Chip high frequency inductor

(2)

Dimensions (L x W, mm)	
1005 [0402]	1.0 x 0.50
1608 [0603]	1.6 x 0.80

(3)

Material
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(4)

Nominal Inductance	
Example	
10N	10nH
R10	100nH

(5)

Tolerance of Inductance	
J	±5%

(6)

Packing Type	
B	Bulk packing
T	Tape & reel packing

(7)

Hazardous Substance Free Products
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### ● SDCL1005 Series

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Typical Q at Frequency (MHz)						Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
				100	300	500	800	1000	1800				
Unit	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	Q						S.R.F	DCR	I <sub>r</sub>	T
SDHL1005C10NJ	10	5.5	100	7	11	15	18	19	25	5400	0.70	200	0.5±0.15 [.020±.006]
SDHL1005C12NJ	12	7.0	100	7.5	12	15	18	20	27	4100	0.80	200	
SDHL1005C15NJ	15	7.0	100	7.5	12	15	18	20	26	4000	0.90	200	
SDHL1005C18NJ	18	7.0	100	8	13	16	19	21	26	3700	1.00	150	
SDHL1005C22NJ	22	7.0	100	8.5	13	17	21	23	28	3500	1.20	150	
SDHL1005C27NJ	27	7.0	100	8.5	13	17	21	23	28	3400	1.50	150	
SDHL1005C33NJ	33	7.0	100	8.3	13	17	21	23	28	3200	1.80	150	
SDHL1005C39NJ	39	7.0	100	8	14	17	20	21	24	2500	2.00	100	
SDHL1005C47NJ	47	7.0	100	8.8	14	18	22	24	29	2400	2.20	100	
SDHL1005C56NJ	56	7.0	100	8.8	14	18	23	24	29	2300	2.50	100	
SDHL1005C68NJ	68	7.0	100	8.6	14	17	22	24	29	2200	2.70	100	
SDHL1005C82NJ	82	7.0	100	8	13	17	20	20	16	2100	2.90	100	
SDHL1005CR10J	100	7.0	100	8	13	17	20	20	13	2000	3.20	100	

\* □: Tolerance levels other than ±5% are also available.

### ● SDCL1005 Series

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Typical Q at Frequency (MHz)						Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
				100	300	500	800	1000	1800				
Unit	nH	-	MHz	-						MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	Q						S.R.F	DCR	I <sub>r</sub>	T
SDHL1608C10NJ	10	8	100	10	22	28	35	39	45	6000	0.6	500	0.8±0.15 [.031±.006]
SDHL1608C12NJ	12	8	100	10	18	23	26	32	42	6000	0.7	500	
SDHL1608C15NJ	15	8	100	12	22	28	35	39	42	5500	0.8	500	
SDHL1608C18NJ	18	8	100	10	18	22	25	30	43	5200	0.9	300	
SDHL1608C22NJ	22	8	100	12	21	27	34	37	37	5000	1.0	300	
SDHL1608C27NJ	27	8	100	10	18	24	26	32	38	4800	1.2	300	
SDHL1608C33NJ	33	8	100	12	21	27	33	35	31	4500	1.4	300	
SDHL1608C39NJ	39	8	100	11	20	26	32	34	29	4000	1.5	200	
SDHL1608C47NJ	47	8	100	12	20	26	31	34	27	3500	1.6	200	
SDHL1608C56NJ	56	8	100	11	20	26	31	34	24	3000	1.8	200	
SDHL1608C68NJ	68	8	100	10	18	21	24	28	20	2800	2.0	200	
SDHL1608C82NJ	82	8	100	10	19	22	26	26	15	2500	2.2	200	
SDHL1608CR10J	100	8	100	10	19	24	27	25	-	2000	2.5	150	
SDHL1608CR12J	120	8	100	10	19	23	26	24	-	1600	2.8	150	
SDHL1608CR15J	150	8	100	10	18	24	26	23	-	1400	3.0	150	
SDHL1608CR18J	180	8	100	10	17	22	23	-	-	1000	3.4	150	

\* □: Tolerance levels other than ±5% are also available.