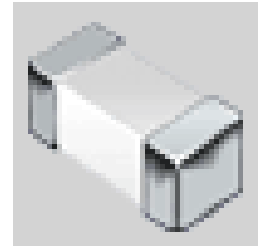




● **FEATURE**

1. Support operating frequency bands up to 10GHz
2. Provides high Q characteristics
3. Monolithic structure for high reliability



● **APPLICATION**

1. Mobile phone
2. Cordless phone, pagers and Other various electronic appliances

● **ORDERING INFORMATION**

WCI100505

PN

-1N0

Inductance

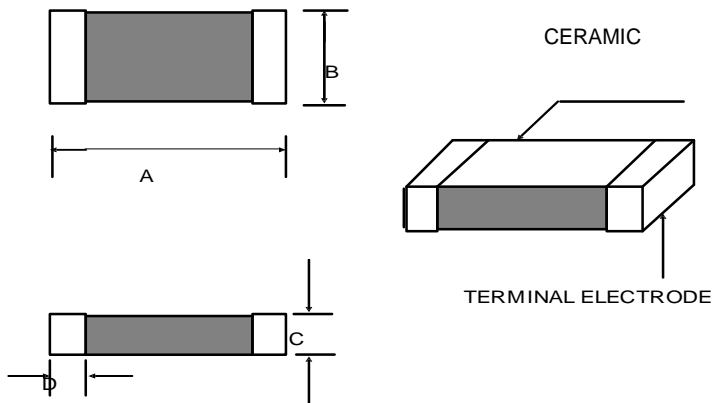
I

S :±0.3nH

J :±5%

K :±10%

● **SHAPE AND DIMENSION**



● **SPECIFICATION**

Dimension in m/m(in inches)

TYPE	A	B	C	D
100505(0402)	1.0±0.05(0.039±0.002)	0.50±0.05(0.019±0.002)	0.5±0.05(0.019±0.002)	0.2±0.10
160808(0603)	1.6±0.15(0.063±0.006)	0.80±0.15(0.031±0.006)	0.8±0.15(0.031±0.006)	0.5±0.30
201209(0805)	2.0±0.20(0.079±0.008)	1.25±0.20(0.049±0.008)	0.9±0.20(0.035±0.008)	0.5±0.30

Note1: Test equipment: HP 4291A Impedance analyzer

Note2: Inductance tolerance: S: ±0.3nH; J: ±5%; K: ±10%



● ELECTRICAL CHARACTERISTICS

PART NUMBER	Inductance (nH)	Q-value (Min)	Test Frequency (MHz)	Self-resonant Frequency (MHz)Min	DC Resistance (mΩ) Max	Rated Current (mA) Max
WCI100505-1N0S	1.0	8	100	6000	120	300
WCI100505-1N2S	1.2	8	100	6000	120	300
WCI100505-1N5S	1.5	8	100	6000	130	300
WCI100505-1N8S	1.8	8	100	6000	140	300
WCI100505-2N2S	2.2	8	100	6000	160	300
WCI100505-2N7S	2.7	8	100	6000	200	300
WCI100505-3N3S	3.3	8	100	6000	220	300
WCI100505-3N9S	3.9	8	100	4000	250	300
WCI100505-4N7S	4.7	8	100	4000	280	300
WCI100505-5N6S	5.6	8	100	4000	300	300
WCI100505-6N8J	6.8	8	100	3900	350	250
WCI100505-8N2J	8.2	8	100	3600	400	250
WCI100505-10NJ	10	8	100	3200	450	250
WCI100505-12NJ	12	8	100	2700	500	200
WCI100505-15NJ	15	8	100	2300	550	200
WCI100505-18NJ	18	8	100	2100	650	200
WCI100505-22NJ	22	8	100	1900	800	200
WCI100505-27NJ	27	8	100	1600	900	200
WCI100505-33NJ	33	8	100	1300	1100	200
WCI100505-39NJ	39	8	100	1200	1200	100
WCI100505-47NJ	47	8	100	1000	1300	100
WCI100505-56NJ	56	8	100	750	1400	100
WCI100505-68NJ	68	8	100	700	1400	100
WCI100505-82NJ	82	8	100	600	1600	100
WCI100505-R10J	100	8	100	350	2000	100
WCI160808-1N0S	1.0	8	100	4000	100	250
WCI160808-1N2S	1.2	8	100	4000	100	250
WCI160808-1N5S	1.5	8	100	4000	100	250
WCI160808-1N8S	1.8	8	100	3800	120	250
WCI160808-2N2S	2.2	8	100	3600	160	250
WCI160808-2N7S	2.7	8	100	3400	200	250
WCI160808-3N3S	3.3	10	100	3200	220	250
WCI160808-3N9S	3.9	10	100	3000	250	250
WCI160808-4N7S	4.7	10	100	2800	280	250



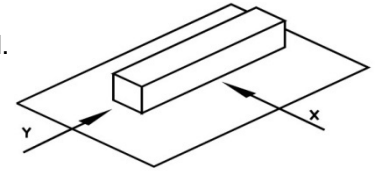
PART NUMBER	Inductance (nH)	Q-value (Min)	Test Frequency (MHz)	Self-resonant Frequency (MHz)Min	DC Resistance (mΩ) Max	Rated Current (mA) Max
WCI160808-5N6S	5.6	10	100	2700	290	250
WCI160808-6N8J	6.8	10	100	2600	300	250
WCI160808-8N2J	8.2	12	100	2200	330	250
WCI160808-10NJ	10	12	100	1800	350	250
WCI160808-12NJ	12	12	100	1650	400	250
WCI160808-15NJ	15	12	100	1350	450	250
WCI160808-18NJ	18	12	100	1350	500	250
WCI160808-22NJ	22	12	100	1100	550	250
WCI160808-27NJ	27	12	100	1100	600	250
WCI160808-33NJ	33	12	100	1000	650	250
WCI160808-39NJ	39	12	100	900	700	250
WCI160808-47NJ	47	12	100	800	900	250
WCI160808-56NJ	56	12	100	700	1000	250
WCI160808-68NJ	68	12	100	650	1200	250
WCI160808-82NJ	82	12	100	600	1500	250
WCI160808-R10J	100	12	100	550	1700	250
WCI160808-R12J	120	8	50	500	2000	200
WCI160808-R18J	180	8	50	500	2400	200
WCI160808-R22J	220	8	50	400	2800	200
WCI160808-R27J	270	8	50	350	3100	200
WCI201209-1N0S	1.0	10	100	10000	100	300
WCI201209-1N2S	1.2	10	100	10000	100	300
WCI201209-1N5S	1.5	10	100	4000	100	300
WCI201209-1N8S	1.8	10	100	4000	100	300
WCI201209-2N2S	2.2	10	100	4000	100	300
WCI201209-2N7S	2.7	12	100	4000	100	300
WCI201209-3N3S	3.3	12	100	4000	130	300
WCI201209-3N9S	3.9	12	100	4000	150	300
WCI201209-4N7S	4.7	12	100	3500	200	300
WCI201209-5N6S	5.6	15	100	3200	230	300
WCI201209-6N8S	6.8	15	100	2800	250	300
WCI201209-8N2S	8.2	15	100	2400	280	300
WCI201209-10NJ	10	15	100	2100	300	300
WCI201209-12NJ	12	15	100	1900	350	300
WCI201209-15NJ	15	15	100	1600	400	300



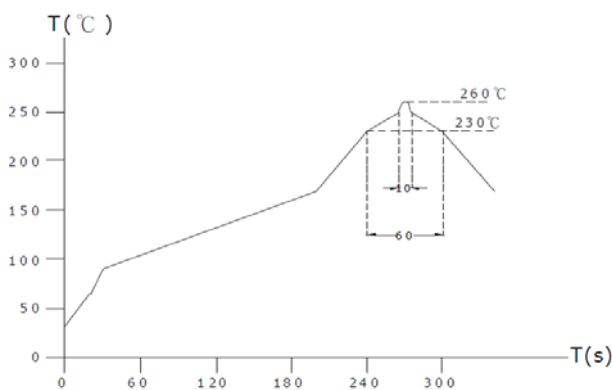
PART NUMBER	Inductance (nH)	Q-value (Min)	Test Frequency (MHz)	Self-resonant Frequency (MHz)Min	DC Resistance (mΩ) Max	Rated Current (mA) Max
WCI201209-18NJ	18	15	100	1500	450	300
WCI201209-22NJ	22	18	100	1400	500	300
WCI201209-27NJ	27	18	100	1300	550	300
WCI201209-33NJ	33	18	100	1200	600	300
WCI201209-39NJ	39	18	100	1000	650	300
WCI201209-47NJ	47	18	100	900	700	300
WCI201209-56NJ	56	18	100	800	750	300
WCI201209-68NJ	68	18	100	700	800	300
WCI201209-82NJ	82	18	100	600	900	300
WCI201209-R10J	100	18	100	600	900	300
WCI201209-R12J	120	13	50	500	950	300
WCI201209-R15J	150	13	50	500	1000	300
WCI201209-R18J	180	13	50	400	1100	300
WCI201209-R22J	220	12	50	350	1200	300
WCI201209-R27J	270	12	50	300	1300	300
WCI201209-R33J	330	12	50	250	1400	300
WCI201209-R39J	390	10	50	250	1400	300
WCI201209-R47J	470	10	50	200	1500	300
WCI201209-R56J	560	10	25	180	5000	50
WCI201209-R68J	680	10	25	160	5500	50

●GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil.
Push in two directions of X.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right)
4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds.
11. Storage environment
Storage condition:
Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C)
Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%)
Transportation condition:
Temperature Range: -35°C ~ 85°C, Humidity Range: 50% ~ 95% RH
12. Use components within 6 months. If 6 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:



Lead – free heat endurance test



Lead-free the recommended reflow condition

