

Beads and Inductors - Chip Ceramic Inductors - Features

Features

- SMD type ceramic chip inductors utilizing monolithic structure provide highly reliable surface mount applications.
- Superior "Q" characteristics guaranteed over the wide frequency range allow high frequency applications.
- Terminal electrode has excellent solder heat resistance for soldering.

Applications

- RF module for telecommunication products.

Ordering Information

CI	-	B	2012	-	681	K	J	T
(1)		(2)	(3)		(4)	(5)	(6)	(7)

(1) *Series*

(5) *Tolerance*

S: $\pm 0.3\text{nH}$

(2) *Material*

J: 5%

K: 10%

(3) *Size Dimensions*

The first two digits: length (mm)

The last two digits: width (mm)

(6) *Termination*

J: Nickel barrier

(4) *Inductance (nH)*

The first two digits are significant, the last digit is the multiplier.

N: a decimal point placed between the first two digits.

(7) *Packing*

B: Bulk pack

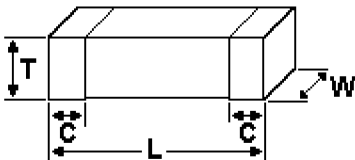
T: Tape and Reel - $\phi 178\text{mm}$ (7 inches)

L: Tape and Reel - $\phi 254\text{mm}$ (10 inches)

Beads and Inductors - Chip Ceramic Inductors - 0402 Series Specifications

0402 Series is the U.S. inches equivalent for the 1005 millimeter series.

	mm	inches
Length	1.0 ± 0.05	.039 ± .002
Width	0.5 ± 0.05	.020 ± .002
T	0.5 ± 0.05	.020 ± .002
C(max)	0.4	.016

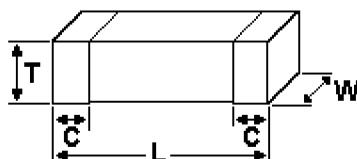


Part Number	Inductance		Q	L.Q. Test Frequency (MHz)	SRF (MHz)		DC Resistance (m ohms)	Rated DC Current (mA)
	nH	Tolerance			Min	Typ		
CI-B1005-10N	1.0	±0.3nH	8	100	4000	6000	100	300
CI-B1005-12N	1.2	±0.3nH	8	100	4000	6000	100	300
CI-B1005-15N	1.5	±0.3nH	8	100	4000	6000	100	300
CI-B1005-18N	1.8	±0.3nH	8	100	3800	6000	120	300
CI-B1005-22N	2.2	±10%	8	100	3600	6000	160	300
CI-B1005-27N	2.7	±10%	8	100	3400	5500	200	300
CI-B1005-33N	3.3	±10%	8	100	3200	5000	220	300
CI-B1005-39N	3.9	±10%	8	100	3000	4700	250	300
CI-B1005-47N	4.7	±10%	8	100	2800	4300	280	300
CI-B1005-56N	5.6	±10%	8	100	2700	4000	290	300
CI-B1005-68N	6.8	±10%	8	100	2600	3650	350	300
CI-B1005-82N	8.2	±10%	8	100	2200	3200	400	300
CI-B1005-100	10	±10%	8	100	1800	2800	450	300

Beads and Inductors - Chip Ceramic Inductors - 0603 Series Specifications

0603 Series is the U.S. inches equivalent for the 1608 millimeter series.

	mm	inches
Length	1.6 ± 0.15	$.063 \pm .006$
Width	0.8 ± 0.15	$.031 \pm .006$
T	0.8 ± 0.15	$.031 \pm .006$
C(max)	0.5	.019

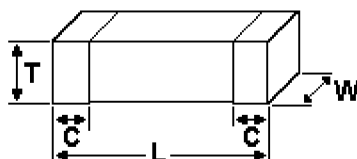


Part Number	Inductance		Q	L.Q. Test Frequency (MHz)	SRF (MHz)		DC Resistance (m ohms)	Rated DC Current (mA)
	nH	Tolerance			Min	Typ		
CI-B1608-10N	1.0	$\pm 0.3\text{nH}$	8	100	4000	6000	100	300
CI-B1608-12N	1.2	$\pm 0.3\text{nH}$	8	100	4000	6000	100	300
CI-B1608-15N	1.5	$\pm 0.3\text{nH}$	8	100	4000	6000	100	300
CI-B1608-18N	1.8	$\pm 0.3\text{nH}$	8	100	3800	6000	120	300
CI-B1608-22N	2.2	$\pm 10\%$	8	100	3600	6000	160	300
CI-B1608-27N	2.7	$\pm 10\%$	8	100	3400	6000	200	300
CI-B1608-33N	3.3	$\pm 10\%$	8	100	3200	5700	220	300
CI-B1608-39N	3.9	$\pm 10\%$	8	100	3000	5600	250	300
CI-B1608-47N	4.7	$\pm 10\%$	8	100	2800	4800	280	300
CI-B1608-56N	5.6	$\pm 10\%$	8	100	2700	4350	290	300
CI-B1608-68N	6.8	$\pm 10\%$	8	100	2600	3750	300	300
CI-B1608-82N	8.2	$\pm 10\%$	8	100	2200	3300	330	300
CI-B1608-100	10	$\pm 5\%/\pm 10\%$	8	100	1800	2850	350	300
CI-B1608-120	12	$\pm 5\%/\pm 10\%$	8	100	1650	2700	400	300
CI-B1608-150	15	$\pm 5\%/\pm 10\%$	8	100	1350	2400	450	300
CI-B1608-180	18	$\pm 5\%/\pm 10\%$	8	100	1350	2050	500	300
CI-B1608-220	22	$\pm 5\%/\pm 10\%$	8	100	1100	1850	550	300
CI-B1608-270	27	$\pm 5\%/\pm 10\%$	8	100	1100	1750	600	300
CI-B1608-330	33	$\pm 5\%/\pm 10\%$	8	100	1000	1500	650	300
CI-B1608-390	39	$\pm 5\%/\pm 10\%$	8	100	900	1350	700	300
CI-B1608-470	47	$\pm 5\%/\pm 10\%$	8	100	800	1200	900	300

Beads and Inductors - Chip Ceramic Inductors - 0805 Series Specifications

0805 Series is the U.S. inches equivalent for the 2012 millimeter series.

	mm	inches
Length	2.00 ± 0.2	$.079 \pm .008$
Width	1.25 ± 0.2	$.049 \pm .008$
T	1.00 ± 0.2	$.039 \pm .008$
C(max)	0.6	.024



Part Number	Inductance		Q	L.Q. Test Frequency (MHz)	SRF (MHz)		DC Resistance (m ohms)	Rated DC Current (mA)
	nH	Tolerance			Min	Typ		
CI-B2012-10N	1.0	$\pm 0.3\text{nH}$	10	100	4000	6000	100	300
CI-B2012-12N	1.2	$\pm 0.3\text{nH}$	10	100	4000	6000	100	300
CI-B2012-15N	1.5	$\pm 0.3\text{nH}$	10	100	4000	6000	100	300
CI-B2012-18N	1.8	$\pm 0.3\text{nH}$	10	100	4000	6000	100	300
CI-B2012-22N	2.2	$\pm 10\%$	10	100	3800	6000	100	300
CI-B2012-27N	2.7	$\pm 10\%$	10	100	3600	6000	100	300
CI-B2012-33N	3.3	$\pm 10\%$	10	100	3400	6000	130	300
CI-B2012-39N	3.9	$\pm 10\%$	10	100	3200	5400	150	300
CI-B2012-47N	4.7	$\pm 10\%$	10	100	3000	4500	200	300
CI-B2012-56N	5.6	$\pm 10\%$	10	100	2800	4000	230	300
CI-B2012-68N	6.8	$\pm 10\%$	10	100	2600	3650	250	300
CI-B2012-82N	8.2	$\pm 10\%$	10	100	2200	3000	280	300
CI-B2012-100	10	$\pm 5\%/\pm 10\%$	10	100	1800	2500	300	300
CI-B2012-120	12	$\pm 5\%/\pm 10\%$	10	100	1650	2450	350	300
CI-B2012-150	15	$\pm 5\%/\pm 10\%$	10	100	1350	2000	400	300
CI-B2012-180	18	$\pm 5\%/\pm 10\%$	10	100	1350	1750	450	300
CI-B2012-220	22	$\pm 5\%/\pm 10\%$	15	100	1100	1700	500	300
CI-B2012-270	27	$\pm 5\%/\pm 10\%$	15	100	1100	1550	550	300
CI-B2012-330	33	$\pm 5\%/\pm 10\%$	15	100	1000	1350	600	300
CI-B2012-390	39	$\pm 5\%/\pm 10\%$	15	100	900	1300	650	300
CI-B2012-470	47	$\pm 5\%/\pm 10\%$	15	100	850	1200	700	300
CI-B2012-560	56	$\pm 5\%/\pm 10\%$	15	100	750	1150	750	300
CI-B2012-680	68	$\pm 5\%/\pm 10\%$	15	100	700	1000	800	300
CI-B2012-820	82	$\pm 5\%/\pm 10\%$	15	100	600	850	900	300

Beads and Inductors - Chip Ceramic Inductors - 0805 Series Specifications - (continued)

0805 Series is the U.S. inches equivalent for the 2012 millimeter series.

	Inductance		Q	L.Q. Test Frequency	SRF (MHz)		DC Resistance (m ohms)	Rated DC Current (mA)
Part Number	nH	Tolerance	Min	(MHz)	Min	Typ	Max	Max
CI-B2012-101	100	±5%/±10%	15	100	500	730	1000	300
CI-B2012-121	120	±5%/±10%	10	50	450	650	1300	250
CI-B2012-151	150	±5%/±10%	10	50	400	550	1500	250
CI-B2012-181	180	±5%/±10%	10	50	350	500	1800	250