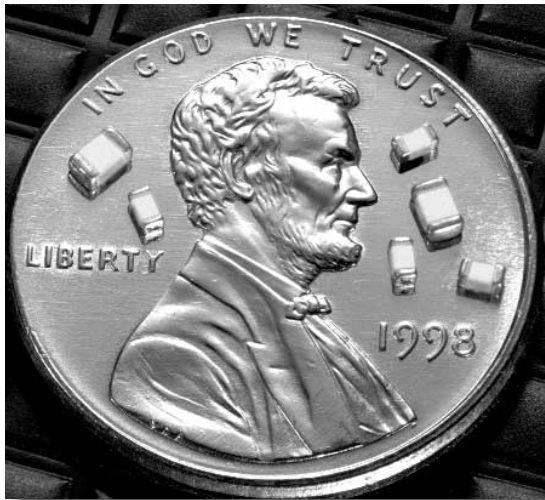


High Frequency Ceramic Chip Inductors



High frequency multi-layer chip inductors feature a monolithic body made of low loss ceramic and high conductivity metal electrodes to achieve optimal high frequency performance. These RF chip inductors are compact in size (0201 - 0805) and feature tin plated nickel barrier terminations and tape and reel packaging which makes them ideal for small size/high volume wireless applications.

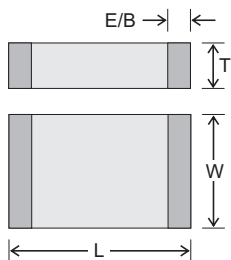
APPLICATIONS

- CELL/PCS RF Modules
- Broadband Components
- RF Transceivers
- Wireless LAN
- RFID
- Custom Applications

PRODUCT RANGE SUMMARY

EIA SIZE (mm)	SIZE CODE	L RANGE	Q FACTOR (Min.)	SRF (Typ.)	TEMPERATURE
0201 (0603)	L-05	1.0 - 33 nH	4 (100 MHz)	>21 GHz (1.0 nH)	-40°C to + 100°C
0402 (1005)	L-07	1.0 - 120 nH	8 (100 MHz)	>21 GHz (1.0 nH)	-40°C to + 100°C
0603 (1608)	L-14	1.0 - 220 nH	12 (100 MHz)	>23 GHz (1.0 nH)	-40°C to + 100°C
0805 (2012)	L-15	1.5 - 680 nH	8 (100 MHz)	>21 GHz (1.5 nH)	-40°C to + 100°C

MECHANICAL CHARACTERISTICS



	0201 (0603)	0402 (1005)	0603 (1608)	0805 (2012)
	Inches mm	Inches mm	Inches mm	Inches mm
Length	.023 ±.0015" (0.6 ±0.04)	.040 ±.004" (1.00 ±.10)	.063 ±.006" (1.60 ±.15)	.079 ±.008" (2.00 ±.20)
Width	.012 ±.0013" (0.3 ±0.03)	.020 ±.004" (0.50 ±.10)	.031 ±.006" (0.80 ±.15)	.047 ±.008" (1.20 ±.20)
Thickness	.012 ±.0013" (0.3 ±0.03)	.020 ±.004" (0.50 ±.10)	.031 ±.006" (0.80 ±.15)	.033 ±.008" (0.85 ±.20)
End Band	.006 ±.002" (0.15 ±0.05)	.009 ±.004" (0.23 ±.10)	.012 ±.008" (0.30 ±.20)	.020 ±.012" (0.50 ±.30)

HOW TO ORDER

L-	07	C	10N
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DEVICE	SIZE	TYPE	VALUE
Inductor	05 = 0201 07 = 0402 14 = 0603 15 = 0805	Ceramic	See Table

J

TOLERANCE

S = ± 0.3 nH for values 1.0 to 5.6 nH
 K = ± 10% for values 3.9 nH and above
 J = ± 5% for values 6.8 nH and above

T

TAPE & REEL CODE

Size	Code	Tape	Reel Qty
0201	T	Paper	15,000
0402	T	Paper	10,000
0603	E	Embossed	4,000
0805	E	Embossed	4,000



0201 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

Inductance Range: 1.0 - 33 nH

Quality Factor: 4 (100 MHz)

SRF >21 GHz (1.0 nH)

Please contact the factory for detailed 0201 performance specifications

0402 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

Part Number	Inductance	Tolerance	Q (Min.)	L/Q Freq.	Typical SRF	DC Resistance Max	Rated Current
L-07C1N0S_-	1.0 nH	± 0.3 nH	8	100 MHz	>15000 MHz	0.12 Ω	300 mA
L-07C1N2S_-	1.2 nH	± 0.3 nH	8	100 MHz	>15000 MHz	0.12 Ω	300 mA
L-07C1N5S_-	1.5 nH	± 0.3 nH	8	100 MHz	>15000 MHz	0.13 Ω	300 mA
L-07C1N8S_-	1.8 nH	± 0.3 nH	8	100 MHz	14000 MHz	0.14 Ω	300 mA
L-07C2N2S_-	2.2 nH	± 0.3 nH	8	100 MHz	12000 MHz	0.16 Ω	300 mA
L-07C2N7S_-	2.7 nH	± 0.3 nH	8	100 MHz	9500 MHz	0.17 Ω	300 mA
L-07C3N3_-	3.3 nH	± 0.3 nH	8	100 MHz	8500 MHz	0.19 Ω	300 mA
L-07C3N9_-	3.9 nH	± 0.3 nH ±10%	8	100 MHz	7000 MHz	0.22 Ω	300 mA
L-07C4N7_-	4.7 nH	± 0.3 nH ±10%	8	100 MHz	6000 MHz	0.24 Ω	300 mA
L-07C5N6_-	5.6 nH	± 0.3 nH ±10%	8	100 MHz	5400 MHz	0.27 Ω	300 mA
L-07C6N8_-	6.8 nH	±5% ±10%	8	100 MHz	5000 MHz	0.32 Ω	250 mA
L-07C8N2_-	8.2 nH	±5% ±10%	8	100 MHz	4600 MHz	0.40 Ω	250 mA
L-07C10N_-	10.0 nH	±5% ±10%	8	100 MHz	3700 MHz	0.45 Ω	250 mA
L-07C12N_-	12.0 nH	±5% ±10%	8	100 MHz	3200 MHz	0.50 Ω	250 mA
L-07C15N_-	15.0 nH	±5% ±10%	8	100 MHz	3100 MHz	0.60 Ω	250 mA
L-07C18N_-	18.0 nH	±5% ±10%	8	100 MHz	2900 MHz	0.65 Ω	200 mA
L-07C22N_-	22.0 nH	±5% ±10%	8	100 MHz	2100 MHz	0.80 Ω	200 mA
L-07C27N_-	27.0 nH	±5% ±10%	8	100 MHz	1900 MHz	0.90 Ω	200 mA
L-07C33N_-	33.0 nH	±5% ±10%	8	100 MHz	1600 MHz	1.00 Ω	200 mA
L-07C39N_-	39.0 nH	±5% ±10%	8	100 MHz	1400 MHz	1.20 Ω	150 mA
L-07C47N_-	47.0 nH	±5% ±10%	8	100 MHz	1200 MHz	1.30 Ω	150 mA
L-07C56N_-	56.0 nH	±5% ±10%	8	100 MHz	1100 MHz	2.00 Ω	150 mA
L-07C68N_-	68.0 nH	±5% ±10%	8	100 MHz	1000 MHz	2.20 Ω	100 mA
L-07C82N_-	82.0 nH	±5% ±10%	8	100 MHz	900 MHz	2.50 Ω	100 mA
L-07CR10_-	100 nH	±5% ±10%	8	100 MHz	850 MHz	2.50 Ω	100 mA

0603 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

Part Number	Inductance	Tolerance	Q (Min.)	L/Q Freq.	Typical SRF	DC Resistance Max	Rated Current
L-14C1N0S_-	1.0 nH	± 0.3 nH	8	100 MHz	>17000 MHz	0.10 Ω	300 mA
L-14C1N2S_-	1.2 nH	± 0.3 nH	8	100 MHz	>17000 MHz	0.10 Ω	300 mA
L-14C1N5S_-	1.5 nH	± 0.3 nH	8	100 MHz	>17000 MHz	0.10 Ω	300 mA
L-14C1N8S_-	1.8 nH	± 0.3 nH	8	100 MHz	13000 MHz	0.10 Ω	300 mA
L-14C2N2S_-	2.2 nH	± 0.3 nH	8	100 MHz	12000 MHz	0.15 Ω	300 mA
L-14C2N7S_-	2.7 nH	± 0.3 nH	8	100 MHz	8600 MHz	0.15 Ω	300 mA
L-14C3N3_-	3.3 nH	± 0.3 nH	8	100 MHz	6500 MHz	0.20 Ω	300 mA
L-14C3N9_-	3.9 nH	± 0.3 nH ±10%	8	100 MHz	6300 MHz	0.20 Ω	300 mA
L-14C4N7_-	4.7 nH	± 0.3 nH ±10%	8	100 MHz	5400 MHz	0.20 Ω	300 mA
L-14C5N6_-	5.6 nH	± 0.3 nH ±10%	8	100 MHz	4600 MHz	0.25 Ω	300 mA
L-14C6N8_-	6.8 nH	±5% ±10%	8	100 MHz	4500 MHz	0.30 Ω	300 mA
L-14C8N2_-	8.2 nH	±5% ±10%	8	100 MHz	3800 MHz	0.33 Ω	300 mA
L-14C10N_-	10.0 nH	±5% ±10%	8	100 MHz	3700 MHz	0.35 Ω	300 mA
L-14C12N_-	12.0 nH	±5% ±10%	8	100 MHz	3200 MHz	0.40 Ω	300 mA
L-14C15N_-	15.0 nH	±5% ±10%	8	100 MHz	2900 MHz	0.45 Ω	300 mA
L-14C18N_-	18.0 nH	±5% ±10%	10	100 MHz	2100 MHz	0.50 Ω	300 mA
L-14C22N_-	22.0 nH	±5% ±10%	10	100 MHz	2100 MHz	0.55 Ω	300 mA
L-14C27N_-	27.0 nH	±5% ±10%	10	100 MHz	2000 MHz	0.60 Ω	300 mA
L-14C33N_-	33.0 nH	±5% ±10%	10	100 MHz	1600 MHz	0.65 Ω	300 mA
L-14C39N_-	39.0 nH	±5% ±10%	10	100 MHz	1500 MHz	0.70 Ω	300 mA
L-14C47N_-	47.0 nH	±5% ±10%	12	100 MHz	1200 MHz	0.90 Ω	300 mA
L-14C56N_-	56.0 nH	±5% ±10%	12	100 MHz	1100 MHz	1.00 Ω	300 mA
L-14C68N_-	68.0 nH	±5% ±10%	12	100 MHz	1000 MHz	1.10 Ω	300 mA
L-14C82N_-	82.0 nH	±5% ±10%	12	100 MHz	850 MHz	1.20 Ω	300 mA
L-14CR10_-	100 nH	±5% ±10%	12	100 MHz	750 MHz	1.20 Ω	300 mA
L-14CR12_-	120 nH	±5% ±10%	8	50 MHz	700 MHz	1.30 Ω	300 mA
L-14CR15_-	150 nH	±5% ±10%	8	50 MHz	650 MHz	1.40 Ω	300 mA
L-14CR18_-	180 nH	±5% ±10%	8	50 MHz	550 MHz	1.50 Ω	300 mA
L-14CR22_-	220 nH	±5% ±10%	8	50 MHz	450 MHz	1.70 Ω	300 mA

0805 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

Part Number	Inductance	Tolerance	Q (Min.)	L/Q Freq.	Typical SRF	DC Resistance Max	Rated Current
L-15C1N5S_-	1.5 nH	± 0.3 nH	10	100 MHz	>6000 MHz	0.10	300 mA
L-15C1N8S_-	1.8 nH	± 0.3 nH	10	100 MHz	>6000 MHz	0.10	300 mA
L-15C2N2S_-	2.2 nH	± 0.3 nH	10	100 MHz	>6000 MHz	0.10	300 mA
L-15C2N7S_-	2.7 nH	± 0.3 nH	12	100 MHz	>6000 MHz	0.12	300 mA
L-15C3N3_-	3.3 nH	± 0.3 nH	12	100 MHz	>6000 MHz	0.13	300 mA
L-15C3N9_-	3.9 nH	± 0.3 nH ±10%	12	100 MHz	5600 MHz	0.15	300 mA
L-15C4N7_-	4.7 nH	± 0.3 nH ±10%	12	100 MHz	5500 MHz	0.20	300 mA
L-15C5N6_-	5.6 nH	± 0.3 nH ±10%	12	100 MHz	4700 MHz	0.23	300 mA
L-15C6N8_-	6.8 nH	±5% ±10%	15	100 MHz	3900 MHz	0.25	300 mA
L-15C8N2_-	8.2 nH	±5% ±10%	15	100 MHz	3200 MHz	0.28	300 mA
L-15C10N_-	10.0 nH	±5% ±10%	15	100 MHz	3100 MHz	0.30	300 mA
L-15C12N_-	12.0 nH	±5% ±10%	15	100 MHz	2800 MHz	0.35	300 mA
L-15C15N_-	15.0 nH	±5% ±10%	15	100 MHz	2400 MHz	0.40	300 mA
L-15C18N_-	18.0 nH	±5% ±10%	15	100 MHz	2100 MHz	0.45	300 mA
L-15C22N_-	22.0 nH	±5% ±10%	15	100 MHz	2000 MHz	0.50	300 mA
L-15C27N_-	27.0 nH	±5% ±10%	15	100 MHz	1800 MHz	0.55	300 mA
L-15C33N_-	33.0 nH	±5% ±10%	15	100 MHz	1700 MHz	0.60	300 mA
L-15C39N_-	39.0 nH	±5% ±10%	18	100 MHz	1400 MHz	0.65	300 mA
L-15C47N_-	47.0 nH	±5% ±10%	18	100 MHz	1200 MHz	0.70	300 mA
L-15C56N_-	56.0 nH	±5% ±10%	18	100 MHz	1000 MHz	0.75	300 mA
L-15C68N_-	68.0 nH	±5% ±10%	18	100 MHz	900 MHz	0.80	300 mA
L-15C82N_-	82.0 nH	±5% ±10%	18	100 MHz	900 MHz	0.85	300 mA
L-15CR10_-	100 nH	±5% ±10%	18	100 MHz	700 MHz	0.90	300 mA
L-15CR12_-	120 nH	±5% ±10%	13	50 MHz	600 MHz	0.95	300 mA
L-15CR15_-	150 nH	±5% ±10%	13	50 MHz	500 MHz	1.00	300 mA
L-15CR18_-	180 nH	±5% ±10%	13	50 MHz	430 MHz	1.10	300 mA
L-15CR22_-	220 nH	±5% ±10%	12	50 MHz	400 MHz	1.20	300 mA
L-15CR27_-	270 nH	±5% ±10%	12	50 MHz	340 MHz	1.30	300 mA
L-15CR33_-	330 nH	±5% ±10%	12	50 MHz	320 MHz	1.50	300 mA
L-15CR39_-	390 nH	±5% ±10%	10	50 MHz	270 MHz	1.60	300 mA
L-15CR47_-	470 nH	±5% ±10%	10	50 MHz	250 MHz	1.80	300 mA
L-15CR56_-	560 nH	±5% ±10%	10	50 MHz	230 MHz	2.50	300 mA
L-15CR68_-	680 nH	±5% ±10%	10	50 MHz	180 MHz	3.00	300 mA

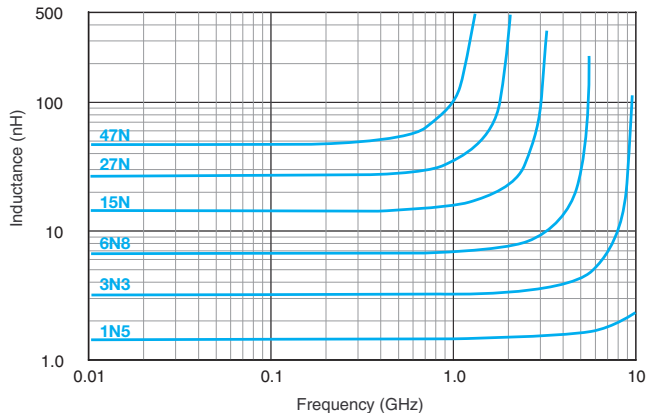
PART NUMBER CROSS REFERENCE

	JOHANSON	TOKO	TAIYO YUDEN	TDK	MURATA	BOURNS
0402	L-07C1N2ST	LL1005-FH1N2S	HK10051N2S-T	MLK1005S1N2ST	LQG10A1N2S00T1	CI100505-1N2D
L Range	1.0 - 47 nH	1.0 - 100 nH	1.0 - 120 nH	1.0 - 100 nH	1.2 - 33 nH	1.0 - 100 nH
0603	L-14C1N2ST	LL1608-FH1N2S	HK16081N2S-T	MLG1608B1N2ST	LQG11A1N2S00T1	CI160808-1N2D
L Range	1.0 - 220 nH	1.2 - 100 nH	1.0 - 220 nH	1.0 - 100 nH	1.2 - 100 nH	1.0 - 100 nH
0805	L-15C1N5ST	LL2012-FH1N5S	HK21251N5S-T			CI201210-1N5D
L Range	1.5 - 470 nH	1.5 - 680 nH	1.5 - 470 nH			1.5 - 270 nH

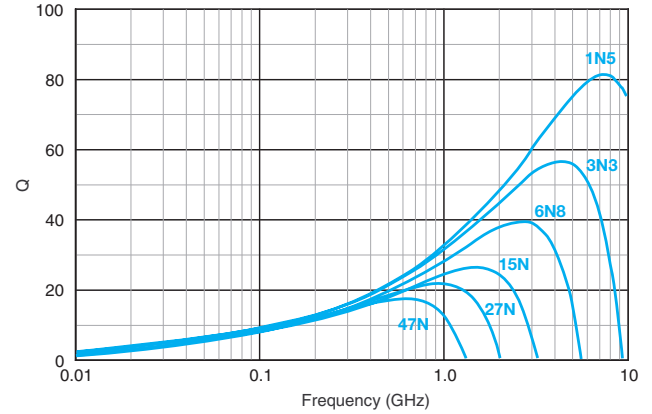
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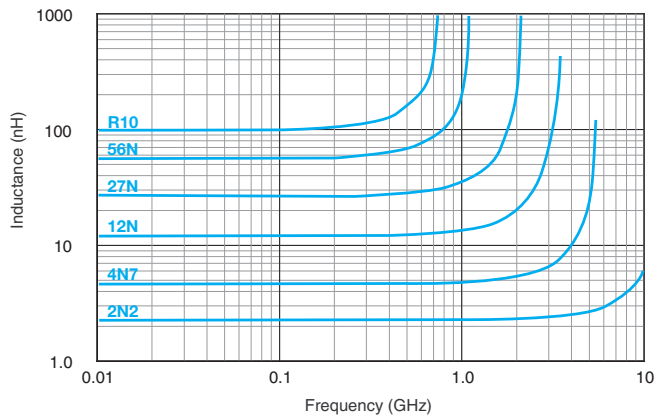
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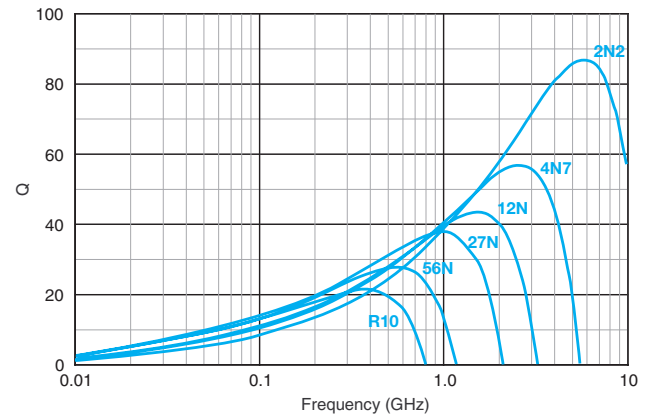
Q VS FREQUENCY: SIZE 0402



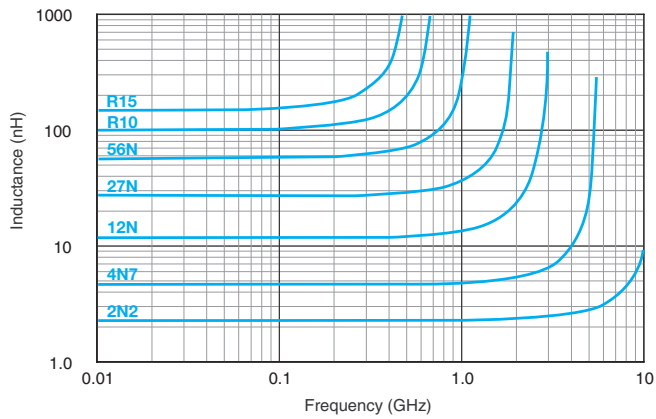
INDUCTANCE VS FREQUENCY: SIZE 0603



Q VS FREQUENCY: SIZE 0603



INDUCTANCE VS FREQUENCY: SIZE 0805



Q VS FREQUENCY: SIZE 0805

