RF 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 and feature lead-free tin plated nickel barrier terminations and tape and reel packaging which makes them ideal for small size/high volume wireless applications.

Applications & Features

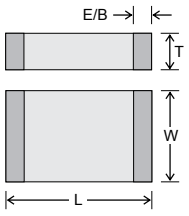
- CELL/PCS Modules
- Broadband Components
- RF Tranceivers
- Wireless LAN
- RFID
- 01005 Mini. Size Available
- RoHS Compliant (Standard, "V" Code)
- Sn/Pb Terminations Optional ("T" Code)

Product Range Summary

EIA SIZE (mm)	SIZE CODE	L RANGE	Q FACTOR (Min.)	SRF (Typ.)	TEMPERATURE
01005 (0402)	L-03	0.8 - 3.9 nH	2 (100 MHz)	>21 GHz (1.0 nH)	-40°C to +100°C
0201 (0603)	L-05	0.6 - 39 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

Mechanical Characteristics

	01005 (0402)		0201 (0603)		0402 (1005)		0603 (1608)	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm
Length	.016 ±.001"	(0.4 ± 0.03)	.024 ±.001"	(0.6 ±0.03)	.039 ±.004"	(1.00 ±.10)	.063 ±.006"	(1.60 ±.15)
Width	.008 ±.001"	(0.2 ± 0.03)	.012 ±.001"	(0.3 ±0.03)	.020 ±.004"	(0.50 ±.10)	.031 ±.006"	(0.80 ±.15)
Thickness	.008 ±.001"	(0.2 ± 0.03)	.012 ±.001"	(0.3 ±0.03)	.020 ±.004"	(0.50 ±.10)	.031 ±.006"	(0.80 ±.15)
End Band	.004 ±.002"	(0.1 ± 0.05)	.006 ±.002"	(0.15 ±0.05)	.009 ±.004"	(0.23 ±.10)	.012 ±.008"	(0.30 ±.20)



How to Order

L-	07	C	10N	J	V	6	T
DEVICE	SIZE	TYPE	VALUE	TOLERANCE	TERMINATION	MARKING	TAPE & REEL

DEVICE
Inductor

SIZE
03 = 01005
05 = 0201
07 = 0402
14 = 0603

TYPE
B = Polarity Marked (0201 size only)
C = Non-Polarity Marked

VALUE
See Table

TOLERANCE

C	= ± 0.2 nH	≤ 1.0 nH
S	= ± 0.3 nH	1.0 to 5.6 nH
J	= ± 5%	6.8 nH and above
K	= ± 10%	3.3 nH and above

TERMINATION
V = Ni/Sn
T = Ni / SnPb

MARKING
4 = No Marking
6 = Orientation Mark

TAPE & REEL

Size	Code	Tape	Reel	Qty
01005	T	Paper	7"	30,000
0201	T	Paper	7"	15,000
0402	T	Paper	7"	10,000
0603	T	Paper	7"	4,000

Part number written: L-07C10NJV6T

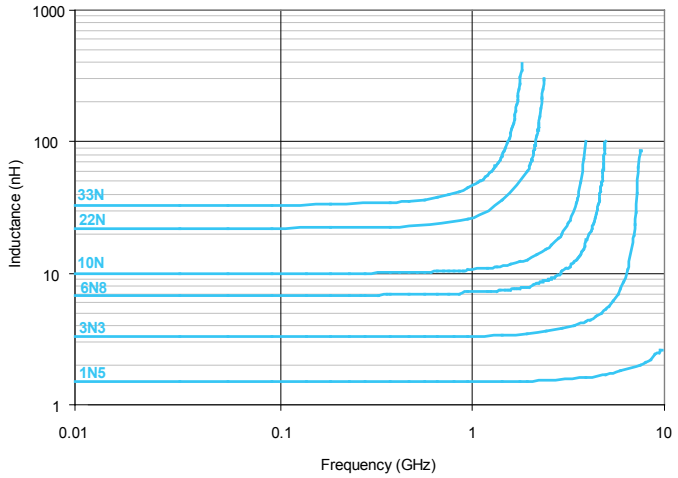
RF Chip Inductor Selection Chart

Inductor Value / EIA Size			01005 (L-03)	0201 (L-05)	0402 (L-07)	0603 (L-14)
Inductance nH	Code	Tolerance	Rated Current			
0.6	0N6	C S		300 mA		
0.7	0N7			300 mA		
0.8	0N8		200 mA (S only)	300 mA		
0.9	0N9			300 mA		
1.0	1N0		200 mA (S only)	300 mA	300 mA	300 mA (S only)
1.2	1N2		200 mA (S only)	300 mA	300 mA (S only)	300 mA (S only)
1.3	1N3			300 mA		
1.5	1N5		200 mA (S only)	300 mA	300 mA (S only)	300 mA (S only)
1.8	1N8	S	200 mA	300 mA	300 mA	300 mA
1.9	1N9			300 mA	300 mA	
2.0	2N0			300 mA	300 mA	
2.2	2N2		200 mA	300 mA	300 mA	300 mA
2.3	2N3			300 mA		
2.4	2N4			300 mA	300 mA	
2.5	2N5			300 mA		
2.7	2N7		200 mA	300 mA	300 mA	300 mA
3.0	3N0	K S		300 mA	300 mA	
3.3	3N3		200 mA	300 mA	300 mA	300 mA
3.6	3N6			300 mA	300 mA	
3.7	3N7			300 mA		
3.9	3N9		200 mA	300 mA	300 mA	300 mA
4.3	4N3				300 mA	
4.7	4N7			300 mA	300 mA	300 mA
5.1	5N1			300 mA	300 mA	
5.6	5N6			300 mA	300 mA	300 mA
6.2	6N2				300 mA	
6.8	6N8	J K		250 mA	250 mA	300 mA
7.5	7N5				250 mA	
8.2	8N2			250 mA	250 mA	300 mA
10	10N			250 mA	250 mA	300 mA
12	12N			250 mA	250 mA	300 mA
13	13N			250 mA	250 mA	
15	15N			250 mA	250 mA	300 mA
18	18N			200 mA	200 mA	300 mA
20	20N			200 mA	200 mA	
22	22N			200 mA	200 mA	300 mA
23	23N				200 mA	
27	27N			200 mA	200 mA	300 mA
33	33N			200 mA	200 mA	300 mA
39	39N			200 mA	150 mA	300 mA
43	43N				150 mA	
47	47N				150 mA	300 mA
56	56N				150 mA	300 mA
68	68N				100 mA	300 mA
82	82N				100 mA	300 mA
100	R10				100 mA	300 mA
120	R12				100 mA	300 mA
150	R15					300 mA
180	R18					300 mA
220	R22					300 mA
270	R27					
330	R33					
390	R39					
420	R42					
560	R56					
680	R68					

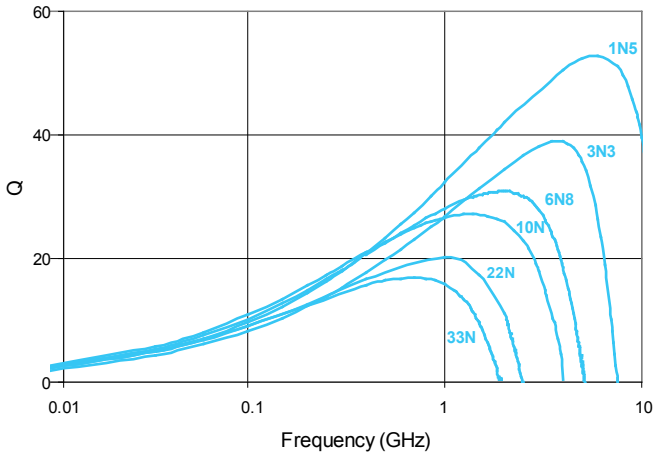
Consult factory for Non-Standard values.

See web page for Chip Inductor Product Detail Summary by part number

INDUCTANCE VS FREQUENCY: SIZE 0201



Q VS FREQUENCY: SIZE 0201



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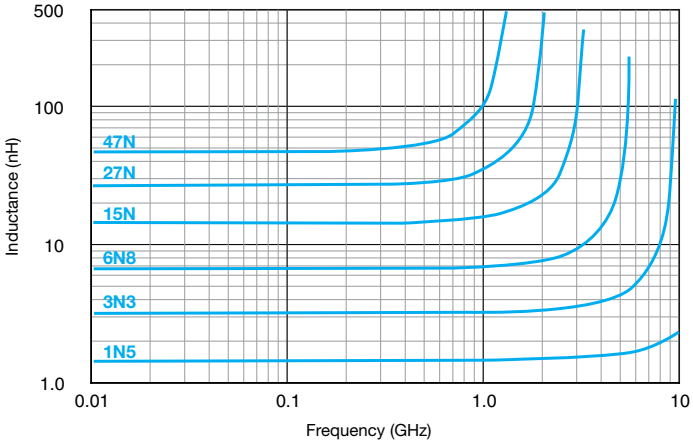

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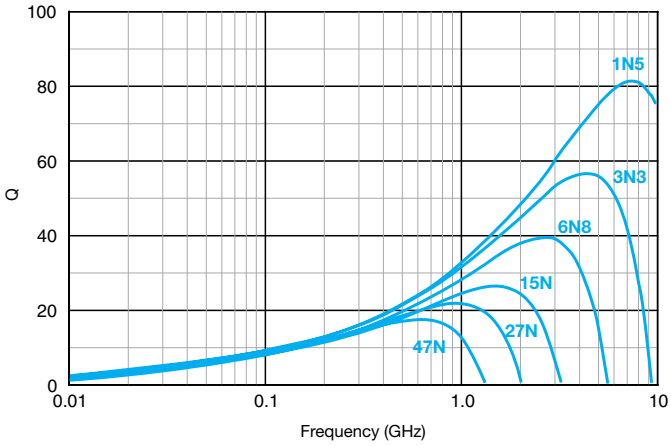
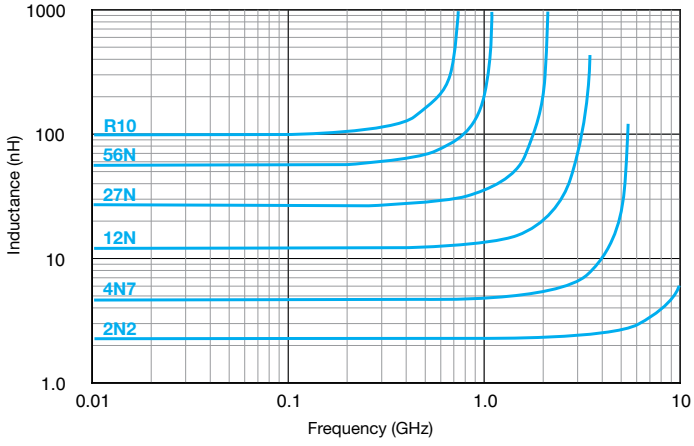


INDUCTANCE VS FREQUENCY: SIZE 0603



Q VS FREQUENCY: SIZE 0603