

# 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
- RoHS Compliant (Standard, "V" Code)
- Sn/Pb Terminations Optional ("T" Code)
- Wireless LAN
- RFID
- 01005 Mini. Size Available

## 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

DEVICE	SIZE	TYPE	VALUE	TOLERANCE	TERMINATION	MARKING	TAPE & REEL																									
Inductor	03 = 01005 05 = 0201 07 = 0402 14 = 0603	B = Polarity Marked (0201 size only) C = Non-Polarity Marked	See Table	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	V = Ni/Sn T = Ni / SnPb	4 = No Marking 6 = Orientation Mark	<table border="1"> <thead> <tr> <th>Size</th> <th>Code</th> <th>Tape</th> <th>Reel</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>01005</td> <td>T</td> <td>Paper</td> <td>7"</td> <td>30,000</td> </tr> <tr> <td>0201</td> <td>T</td> <td>Paper</td> <td>7"</td> <td>15,000</td> </tr> <tr> <td>0402</td> <td>T</td> <td>Paper</td> <td>7"</td> <td>10,000</td> </tr> <tr> <td>0603</td> <td>T</td> <td>Paper</td> <td>7"</td> <td>4,000</td> </tr> </tbody> </table>	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
Size	Code	Tape	Reel	Qty																												
01005	T	Paper	7"	30,000																												
0201	T	Paper	7"	15,000																												
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0603	T	Paper	7"	4,000																												

Part number written: L-07C10NJV6T

## RF CHIP INDUCTOR SELECTION CHART

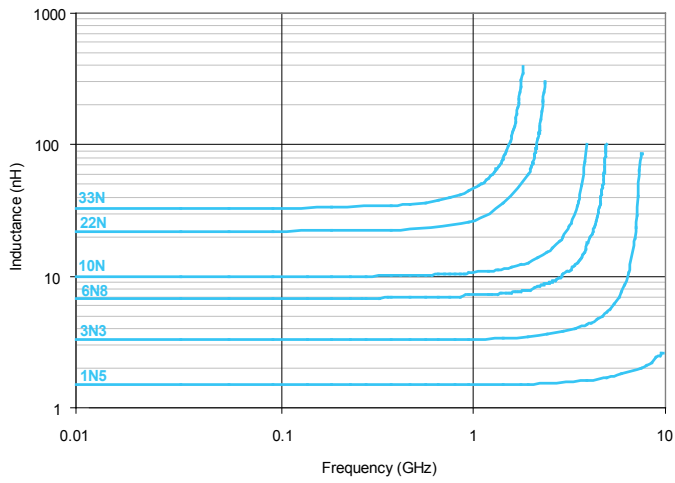
Inductor Value		EIA Size	01005 (L-03)	0201 (L-05)	0402 (L-07)	0603 (L-14)	
Inductance nH	Code	Tolerance	Rated Current				
0.6	0N6	C		300 mA			
0.7	0N7				300 mA		
0.8	0N8		200 mA (S only)	300 mA			
0.9	0N9			300 mA			
1.0	1N0		200 mA (S only)	300 mA	300 mA	300 mA (S only)	
1.2	1N2	S	200 mA (S only)	300 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		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	S				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	J			300 mA		
6.8	6N8			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		K		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.

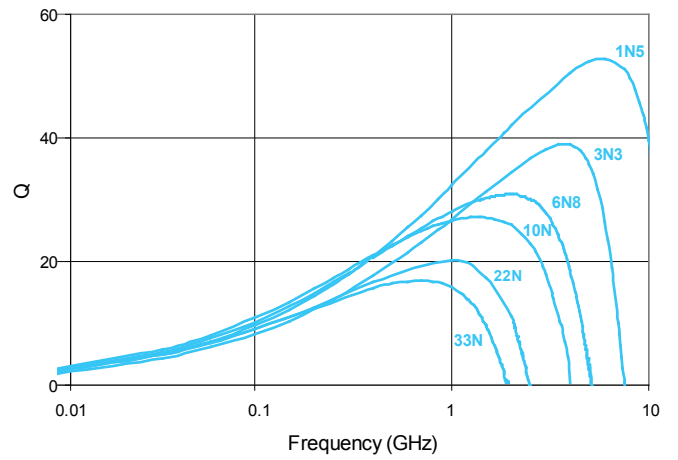
See web page for Chip Inductor Product Detail Summary by part number

# RF CHARACTERISTICS CHARACTERISTICS (TYPICAL)

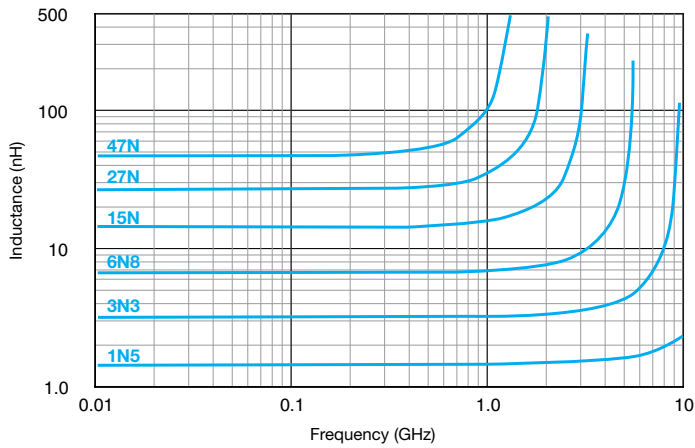
INDUCTANCE VS FREQUENCY: SIZE 0201



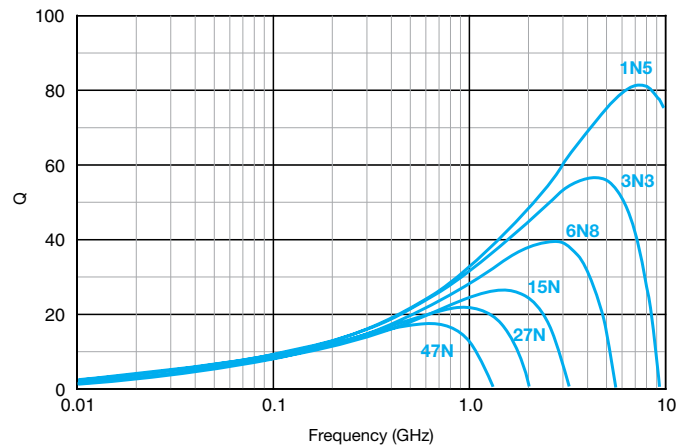
Q VS FREQUENCY: SIZE 0201



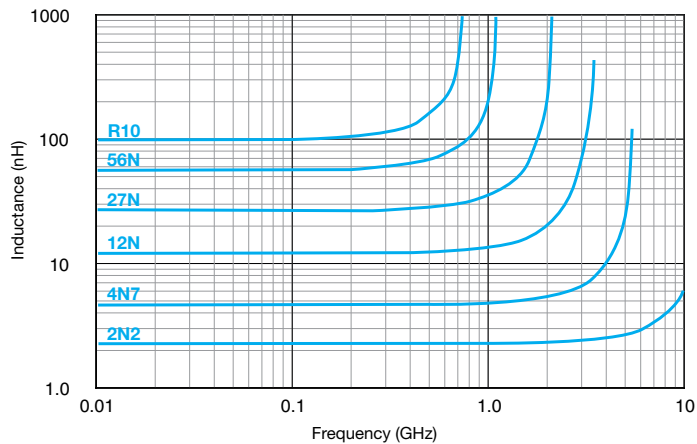
INDUCTANCE VS FREQUENCY: SIZE 0402



Q VS FREQUENCY: SIZE 0402



INDUCTANCE VS FREQUENCY: SIZE 0603



Q VS FREQUENCY: SIZE 0603

