

# RF CERAMIC CHIP INDUCTORS



Polarity Half-Marked Inductors (0201 only)

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

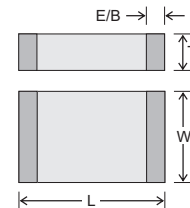
- CELL/PCS Modules
- Broadband Components
- RF Tranceivers
- RoHS Compliant (Standard, "V" Code)
- Sn/Pb Terminations Optional ("T" Code)
- Wireless LAN
- RFID

## PRODUCT RANGE SUMMARY

EIA SIZE (mm)	SIZE CODE	L RANGE	Q FACTOR (Min.)	SRF (Typ.)	TEMPERATURE
0201 (0603)	L-05	0.6 - 39 nH	4 (100 MHz)	>21 GHz (1.0 nH)	-55°C to +100°C
0402 (1005)	L-07	1.0 - 120 nH	8 (100 MHz)	>21 GHz (1.0 nH)	-55°C to +100°C
0603 (1608)	L-14	1.0 - 220 nH	12 (100 MHz)	>23 GHz (1.0 nH)	-55°C to +100°C

## MECHANICAL CHARACTERISTICS

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

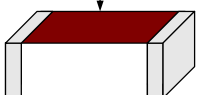


## HOW TO ORDER

DEVI	SIZE	TYPE	VALUE	TOLERANCE	TERMINATION	MARKING	PACKAGING
Inductor	05 = 0201 07 = 0402 14 = 0603	B = Polarity Half-Marked (all 0201) C = 0402 and 0603 (see "Marking")	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 (all 0603) 6 = Orientation Mark (all 0201 and 0402*)	Tape and Reel Size Code Tape Reel Qty 0201 T Paper 7" 15,000 0402 T Paper 7" 10,000 0603 T Paper 7" 4,000 Bulk (Loose Pcs.) Size Code All S

Part number written: L-07C10NJV6T

Orientation Full Marking (all 0402)



\*Please note that all 0402 inductors (L-07C) have orientation full marking only.

## RF CHIP INDUCTOR SELECTION CHART

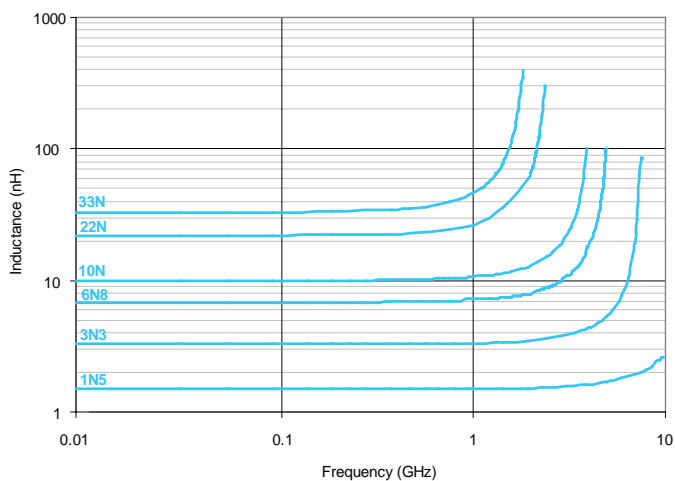
EIA Size		Inductor Value	Tolerance	0201 (L-05)	0402 (L-07)	0603 (L-14)
Inductance nH	Code					
0.6	0N6	C S		300 mA		
0.7	0N7			300 mA		
0.8	0N8			300 mA		
0.9	0N9			300 mA		
1.0	1N0			300 mA	300 mA	300 mA (S only)
1.2	1N2			300 mA	300 mA (S only)	300 mA (S only)
1.3	1N3			300 mA		
1.5	1N5			300 mA	300 mA (S only)	300 mA (S only)
1.8	1N8			300 mA	300 mA (S only)	300 mA (S only)
1.9	1N9			300 mA	300 mA (S only)	
2.0	2N0			300 mA	300 mA (S only)	
2.2	2N2			300 mA	300 mA (S only)	300 mA (S only)
2.3	2N3			300 mA		
2.4	2N4			300 mA	300 mA (S only)	
2.5	2N5			300 mA		
2.7	2N7			300 mA	300 mA (S only)	300 mA (S only)
3.0	3N0			300 mA	300 mA (S only)	
3.3	3N3			300 mA	300 mA	300 mA
3.6	3N6			300 mA	300 mA	
3.7	3N7			300 mA		
3.9	3N9	300 mA	300 mA	300 mA		
4.3	4N3	K 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				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		
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	J K		150 mA		
47	47N			150 mA	150 mA	300 mA
56	56N			100 mA	100 mA	300 mA
68	68N			100 mA	100 mA	300 mA
82	82N			100 mA	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. C tolerance are non-standard terms  
See web page for Chip Inductor Product Detail Summary by part number

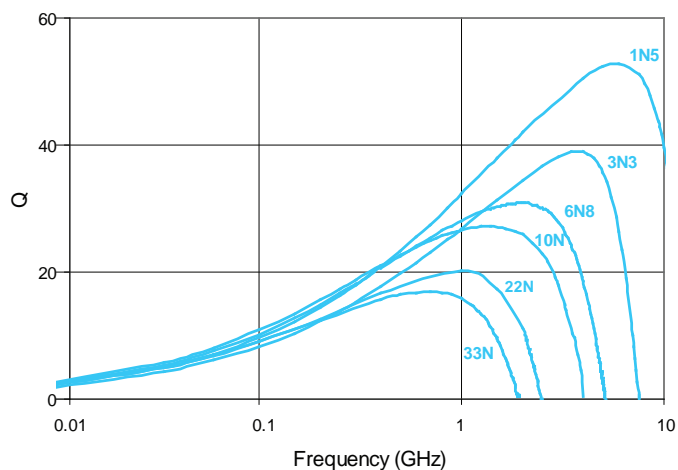


# RF CHARACTERISTICS CHARACTERISTICS (TYPICAL)

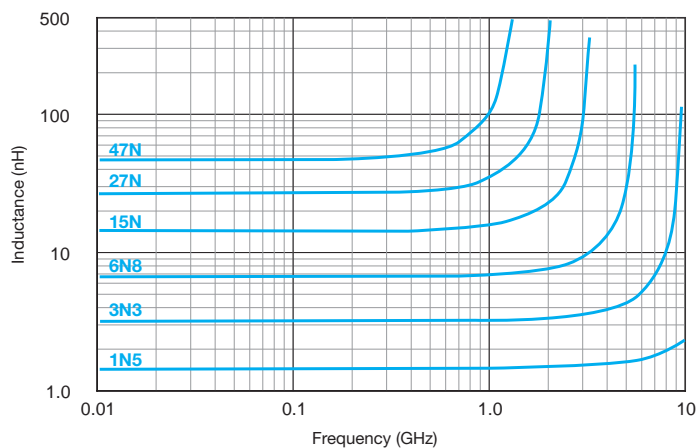
INDUCTANCE VS FREQUENCY: SIZE 0201



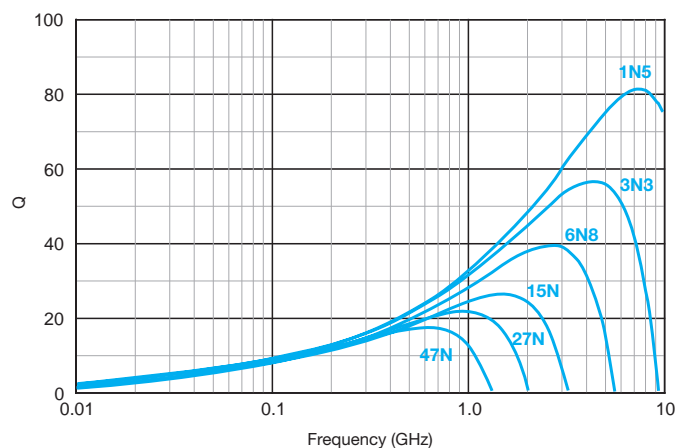
Q VS FREQUENCY: SIZE 0201



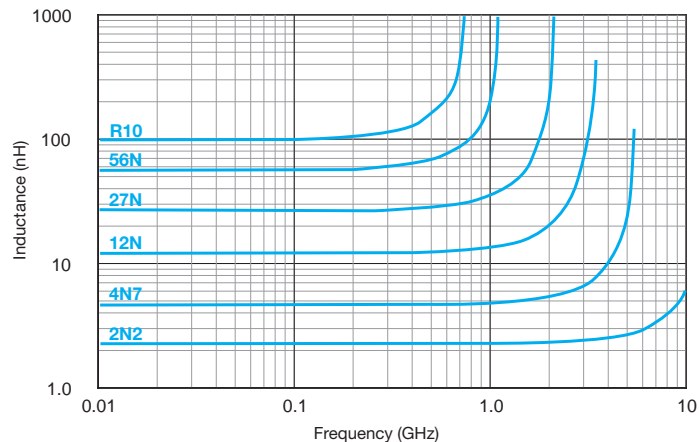
INDUCTANCE VS FREQUENCY: SIZE 0402



Q VS FREQUENCY: SIZE 0402



INDUCTANCE VS FREQUENCY: SIZE 0603



Q VS FREQUENCY: SIZE 0603

