

# 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

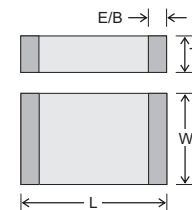
- CELL/PCS Modules
- Broadband Components
- RF Tranceivers
- RoHS Compliant (Standard, "V" Code)
- Sn/Pb Terminations Optional ("T" Code)
- Wireless LAN
- RFID

## 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)

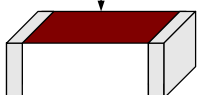


## HOW TO ORDER

DEVICE	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

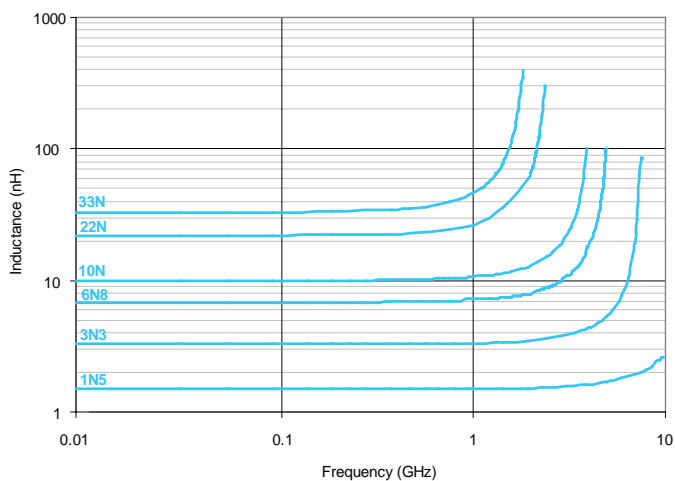
EIA Size			0201 (L-05)	0402 (L-07)	0603 (L-14)
Inductor Value	Inductance nH				
	Code	Tolerance			
0.6	0N6	C S	300 mA		
0.7	0N7		300 mA		
0.8	0N8		300 mA		
0.9	0N9		300 mA		
1.0	1N0		300 mA	300 mA	300 mA (S only)
1.2	1N2		300 mA	300 mA (S only)	300 mA (S only)
1.3	1N3		300 mA		
1.5	1N5		300 mA	300 mA (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	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. C tolerance are non-standard terms  
See web page for Chip Inductor Product Detail Summary by part number

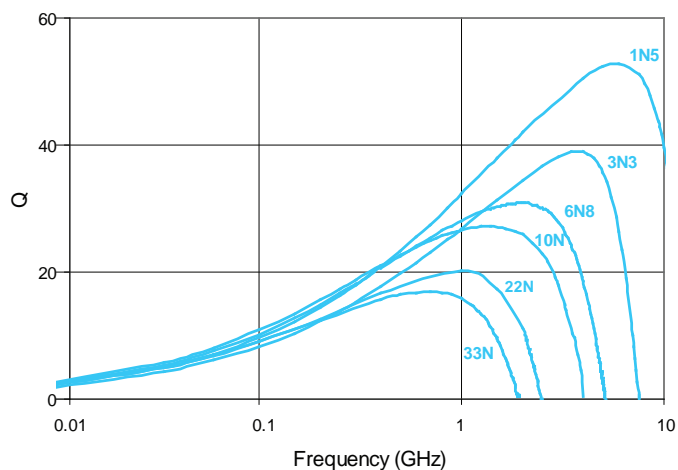


# RF CHARACTERISTICS CHARACTERISTICS (TYPICAL)

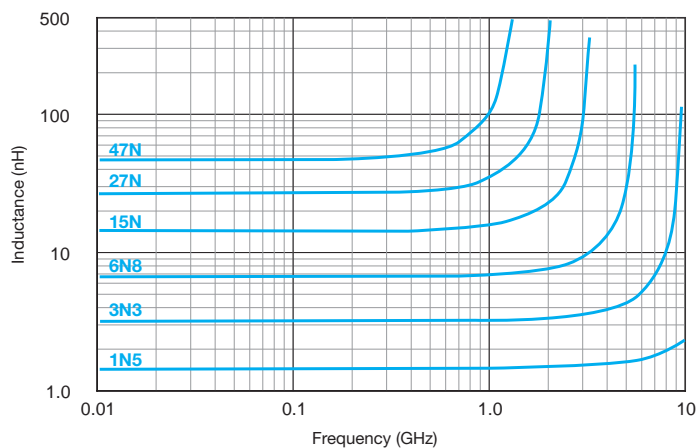
INDUCTANCE VS FREQUENCY: SIZE 0201



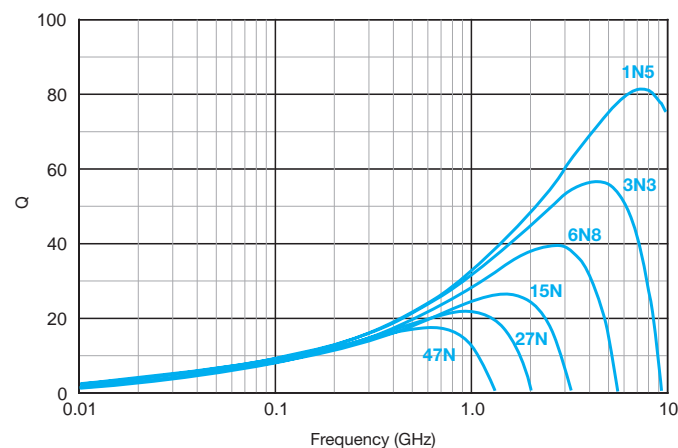
Q VS FREQUENCY: SIZE 0201



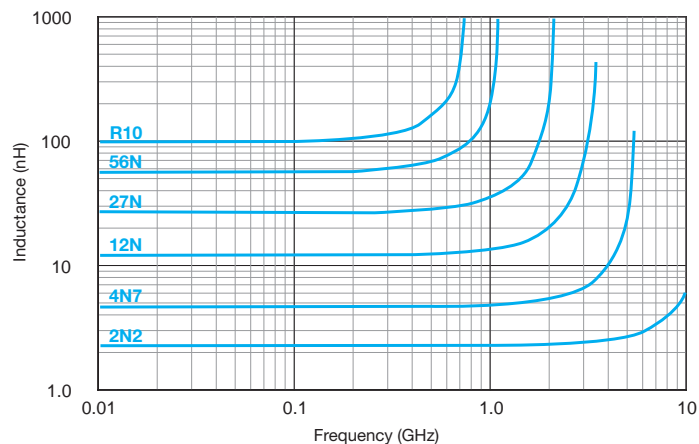
INDUCTANCE VS FREQUENCY: SIZE 0402



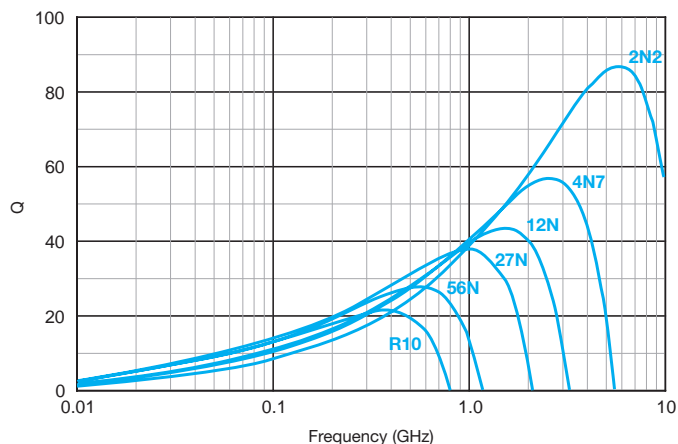
Q VS FREQUENCY: SIZE 0402



INDUCTANCE VS FREQUENCY: SIZE 0603



Q VS FREQUENCY: SIZE 0603



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Johanson:

[L-07C3N3SV6T](#) [L-07C12NJV6T](#) [L-07C18NJV6T](#) [L-07C8N2JV6T](#) [L-07C10NJV6T](#) [L-07C3N9SV6T](#) [L-14C39NJV4T](#)  
[L-07C7N5JV6T](#) [L-07C1N8SV6T](#) [L-07C1N5SV6T](#) [L-07C15NJV6T](#) [L-07C6N8JV6T](#) [L-07C2N2SV6T](#) [L-07C5N6SV6T](#)  
[L-07C27NJV6T](#) [L-07C4N7SV6T](#) [L-05B2N2SV6T](#) [L-14C6N8JV4T](#) [L-07C2N7SV6T](#) [L-07C4N3SV6T](#) [L-05B3N0KV6T](#)  
[L-14C15NKV4T](#) [L-05B1N8SV6T](#) [L-05B33NKV6T](#) [L-05B1N0SV6T](#) [L-07C7N5KV6T](#) [L-05B8N2KV6T](#) [L-14C39NKV4T](#)  
[L-05B6N8JV6T](#) [L-14C1N0SV4T](#) [L-07C33NKV6T](#) [L-07C47NJV6T](#) [L-14CR22JV4T](#) [L-14C6N8KV4T](#) [L-14C68NJV4T](#)  
[L-07C2N4SV6T](#) [L-07C20NJV6T](#) [L-14C3N9KV4T](#) [L-05B15NKV6T](#) [L-05B27NJV6T](#) [L-07CR12JV6T](#) [L-07C68NKV6T](#)  
[L-05B12NKV6T](#) [L-14C27NKV4T](#) [L-05B5N1SV6T](#) [L-14C12NJV4T](#) [L-05B4N7KV6T](#) [L-05B2N4SV6T](#) [L-14CR12JV4T](#)  
[L-14C56NKV4T](#) [L-07C27NKV6T](#) [L-07C18NKV6T](#) [L-14C4N7KV4T](#) [L-14C33NJV4T](#) [L-07C5N6KV6T](#) [L-14CR15KV4T](#)  
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[L-14C47NKV4T](#) [L-07C13NKV6T](#) [L-05B5N6KV6T](#) [L-05B6N8KV6T](#) [L-14C18NJV4T](#) [L-05B39NJV6T](#) [L-14C12NKV4T](#)  
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