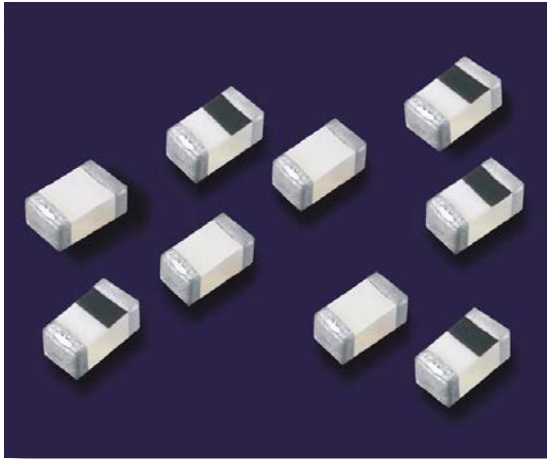




**THE DATASHEET OF  
L-05B1N8SV6T**



# 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

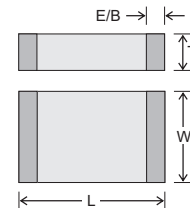
- CELL/PCS Modules
- Broadband Components
- RF Tranceivers
- RoHS Compliant (Standard, "V" Code)
- Sn/Pb Terminations Optional ("T" Code)
- Wireless LAN
- RFID

## 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)

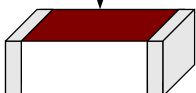


## HOW TO ORDER

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 Bulk (Loose Pcs.)																				
							<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>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	0201	T	Paper	7"	15,000	0402	T	Paper	7"	10,000	0603	T	Paper	7"	4,000
Size	Code	Tape	Reel	Qty																							
0201	T	Paper	7"	15,000																							
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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

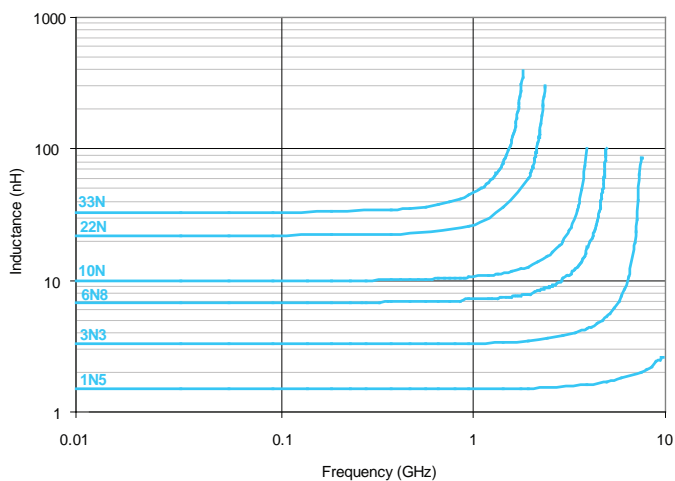
Inductor Value		EIA Size	0201 (L-05)	0402 (L-07)	0603 (L-14)	
Inductance nH	Code	Tolerance				
0.6	0N6	C S	300 mA			
0.7	0N7		300 mA			
0.8	0N8		300 mA			
0.9	0N9		300 mA			
1.0	1N0		300 mA	300 mA	300 mA (S only)	
1.2	1N2		300 mA	300 mA (S only)	300 mA (S only)	
1.3	1N3		300 mA			
1.5	1N5		300 mA	300 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		K S	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			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	300 mA	
7.5	7N5		250 mA			
8.2	8N2		250 mA	300 mA		
10	10N		250 mA	300 mA		
12	12N		250 mA	300 mA		
13	13N		250 mA			
15	15N		250 mA	300 mA		
18	18N		200 mA	300 mA		
22	22N		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	J K	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. C tolerance are non-standard terms  
See web page for Chip Inductor Product Detail Summary by part number

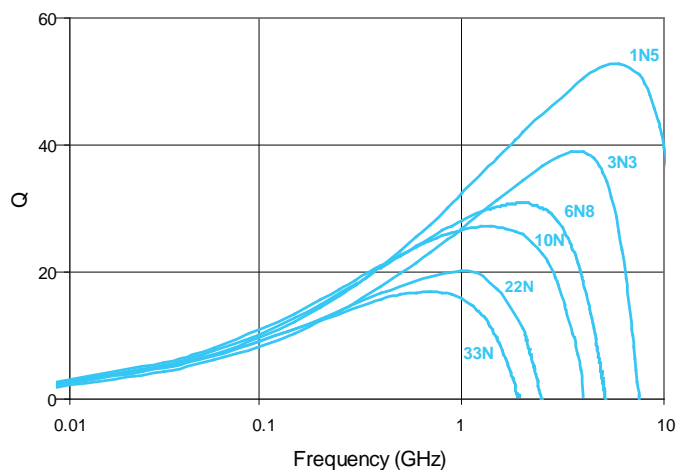


# RF CHARACTERISTICS CHARACTERISTICS (TYPICAL)

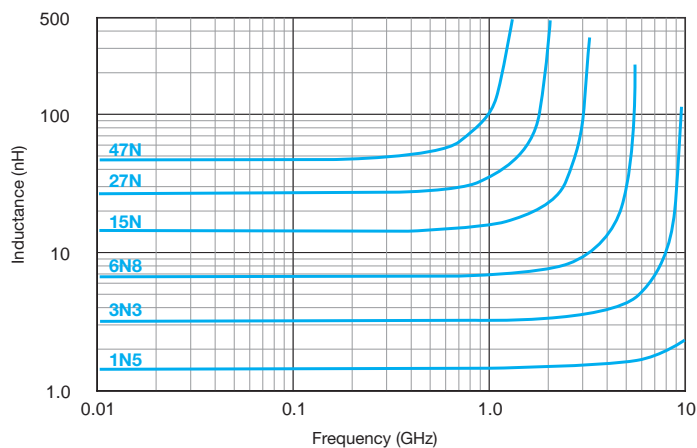
INDUCTANCE VS FREQUENCY: SIZE 0201



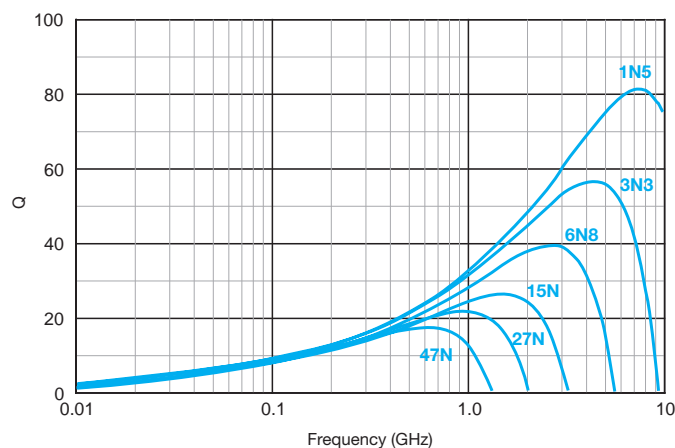
Q VS FREQUENCY: SIZE 0201



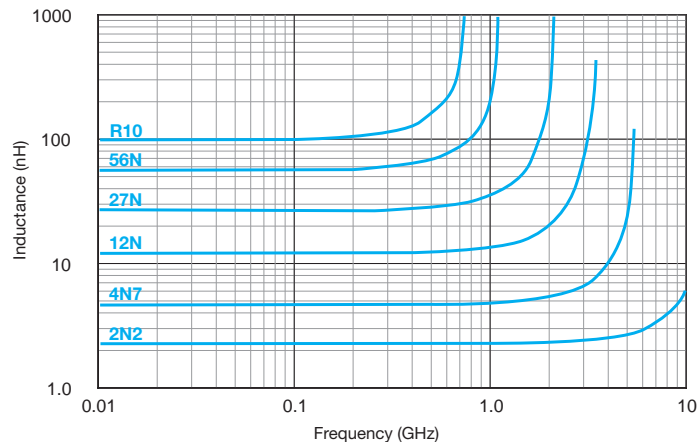
INDUCTANCE VS FREQUENCY: SIZE 0402



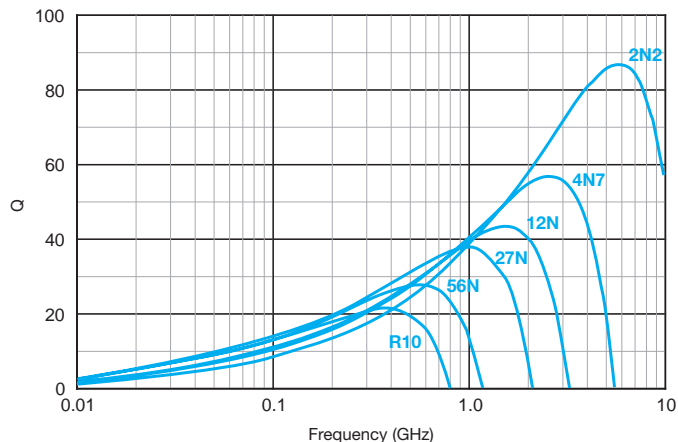
Q VS FREQUENCY: SIZE 0402



INDUCTANCE VS FREQUENCY: SIZE 0603





Q VS FREQUENCY: SIZE 0603



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