

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)	-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

	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> <table border="1"> <thead> <tr> <th>Size</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>S</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	All	S
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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		Tolerance	0201 (L-05)	0402 (L-07)	0603 (L-14)	
Inductor Value	Inductance nH Code					
0.6	0N6	C	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	S	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	S	300 mA	300 mA	300 mA	
1.9	1N9		300 mA	300 mA		
2.0	2N0		300 mA	300 mA		
2.2	2N2		300 mA	300 mA	300 mA	
2.3	2N3		300 mA			
2.4	2N4		300 mA			
2.5	2N5		300 mA			
2.7	2N7		300 mA	300 mA		
3.0	3N0	K	300 mA	300 mA		
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	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	J	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

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

