

# ATC 0402 WL SERIES WIRE WOUND CHIP INDUCTORS

## Inductor Selection Guide

Inductance (nH)	Tolerance (%)	Q min.	SRF (MHz) typ.	RDC (Ohms) max.	IDC (mA)	900 MHz		1.7 GHz	
						L typ.	Q typ.	L typ.	Q typ.
1.0 @ 250 (MHz)	K, J	16	>6000	0.045	1360	1.02	77	1.02	69
2.0 @ 250 (MHz)	K, J	16	>6000	0.070	1040	1.93	54	1.93	75
2.2 @ 250 (MHz)	K, J	19	>6000	0.070	960	2.19	59	2.23	100
3.3 @ 250 (MHz)	K, J	19	6000	0.066	840	3.10	65	3.12	87
3.6 @ 250 (MHz)	K, J	19	6000	0.066	840	3.56	45	3.62	71
3.9 @ 250 (MHz)	K, J	19	5800	0.066	840	3.89	50	4.00	75
5.1 @ 250 (MHz)	K, J	20	5800	0.083	800	5.15	56	5.25	82
5.6 @ 250 (MHz)	K, J	20	5800	0.083	760	5.16	54	5.28	81
6.2 @ 250 (MHz)	K, J	20	5800	0.083	760	6.16	52	6.37	76
7.5 @ 250 (MHz)	K, J	22	5800	0.104	680	7.91	60	8.22	88
8.2 @ 250 (MHz)	K, J	22	4400	0.104	680	8.50	57	8.85	84
9.0 @ 250 (MHz)	K, J	22	4160	0.104	680	9.07	62	9.53	78
10 @ 250 (MHz)	K, J	21	3900	0.195	480	9.8	50	10.1	67
11 @ 250 (MHz)	K, J	24	3680	0.120	640	10.7	52	11.2	78
12 @ 250 (MHz)	K, J	24	3600	0.120	640	11.9	53	12.7	71
15 @ 250 (MHz)	K, J	24	3280	0.172	560	14.6	55	15.5	77
19 @ 250 (MHz)	K, J	24	3040	0.202	480	19.1	50	21.1	67
23 @ 250 (MHz)	K, J	24	2720	0.214	400	23.8	49	26.9	64
27 @ 250 (MHz)	K, J	24	2480	0.298	400	28.7	49	33.5	63
36 @ 250 (MHz)	K, J	24	2320	0.403	320	39.5	44	48.4	53
40 @ 250 (MHz)	K, J	24	2240	0.438	320	39.0	44	47.4	33
47 @ 250 (MHz)	K, J	20	2100	0.830	150	50.0	38	-	-

## ATC Part Number Code

**0402 WL 100 K T**

**EIA Case Size**  
0402, 0603, 0805, 1008, 1206

**Wire Wound Inductor**  
Inductance value in nH.  
1st and 2nd digits are significant digits.  
3rd digit is multiplier.  
R is decimal point.

**Package**  
T - Tape & Reel  
B - Bulk

**Tolerance.**  
See table below.

Inductance Tolerances		
Code	J (%)	K (%)
Tol.	± 5	± 10

The above part number refers to an ATC 0402 WL wire wound chip inductor, 10 nH, K (±10%) tolerance, in tape and reel packaging. Tighter tolerances are available. Consult factory.

## Mechanical Configurations

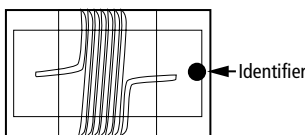
A max.	B max.	C max.	D ref.	E	F	G	H	I	J
.050 (1.27)	.030 (0.76)	.024 (0.61)	0.06 (0.15)	.020 (0.51)	.009 (0.23)	.022 (0.56)	.026 (0.66)	.019 (0.50)	.018 (0.46)

Inches (mm)

## Marking Code

0402- No mark due to size.

0603 and 0805 Series - Because of their small size, these parts are marked with a single dot. The inductance value represented by the dot is shown on the data sheet for each series.

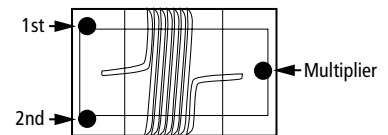


1008 and 1206 Series - These parts are marked with three color dots. The table below shows the significance of each color.

Dots 1 and 2 indicate the inductance in nanoHenries

Dot 3 is a multiplier showing the number of added zeroes

- 0 = Black
- 1 = Brown
- 2 = Red
- 3 = Orange
- 4 = Yellow
- 5 = Green
- 6 = Blue
- 7 = Violet
- 8 = Gray
- 9 = White



Examples:

- Gray Red Black = 82 nH
- Brown Red Brown = 120 nH
- Yellow Violet Red = 4700 nH

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