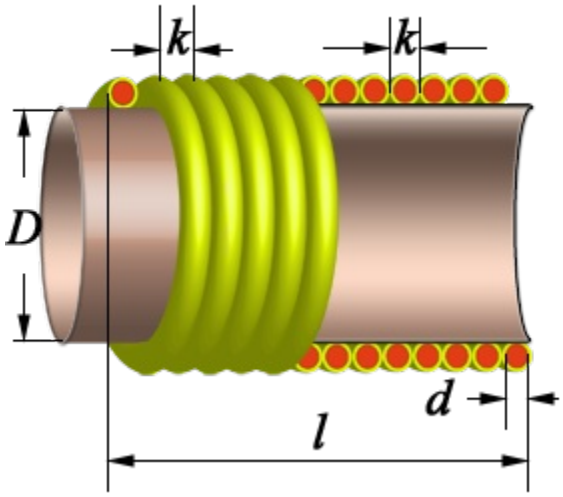
× – **7** - 04.01.2025 10:51
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 270 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

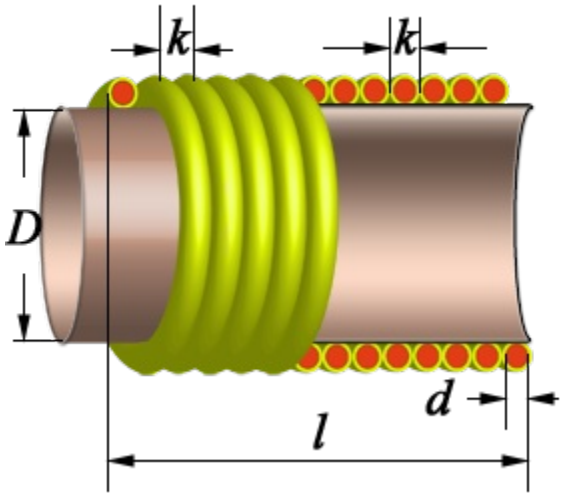
Result:
Number of turns of the coil N = 5,948
Length of wire without leads lw = 20,831 cm
Length of winding l = 11,361 mm
Weight of wire m = 3,298 g
Resistance of the coil Rdc = 0,002 Ohm
Reactance of the coil X = 84,823 Ohm

Self capacitance Cs = 0,341 pF
Coil self-resonance frequency Fsr = 561,687 MHz
Coil constructive Q-factor Q = 431
Loss resistance ESR = 0,195 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 37,185 pF
=> Characteristic impedance: ρ = 85 Ohm
=> Equivalent resistance: Re = 25,548 kOhm
=> Bandwidth: 3dBΔf = 166,009 kHz

Input data for LTSpice:
Inductance: 0.270µ
Series resistance: 2.032m
Parallel resistance: 36.197k
Parallel capacitance: 0.341p

× – **6** - 04.01.2025 10:51
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 160 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

Result:
Number of turns of the coil N = 4,096
Length of wire without leads lw = 14,343 cm
Length of winding l = 8,331 mm
Weight of wire m = 2,271 g
Resistance of the coil Rdc = 0,001 Ohm
Reactance of the coil X = 50,265 Ohm

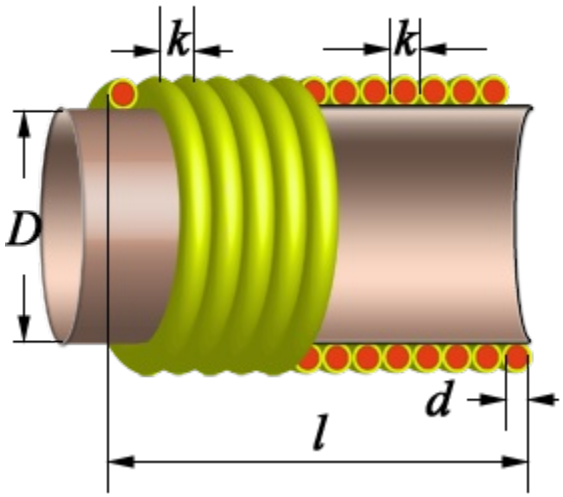
Self capacitance Cs = 0,336 pF
Coil self-resonance frequency Fsr = 730,051 MHz
Coil constructive Q-factor Q = 458
Loss resistance ESR = 0,109 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 62,989 pF
=> Characteristic impedance: ρ = 50 Ohm
=> Equivalent resistance: Re = 15,79 kOhm
=> Bandwidth: 3dBΔf = 159,17 kHz

Input data for LTSpice:
Inductance: 0.160µ
Series resistance: 1.399m
Parallel resistance: 22.923k

Parallel capacitance: 0.336p

× **– 5** - 04.01.2025 10:51
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 100 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

Result:
Number of turns of the coil N = 3,003
Length of wire without leads lw = 10,516 cm
Length of winding l = 6,545 mm
Weight of wire m = 1,665 g
Resistance of the coil Rdc = 0,001 Ohm
Reactance of the coil X = 31,416 Ohm

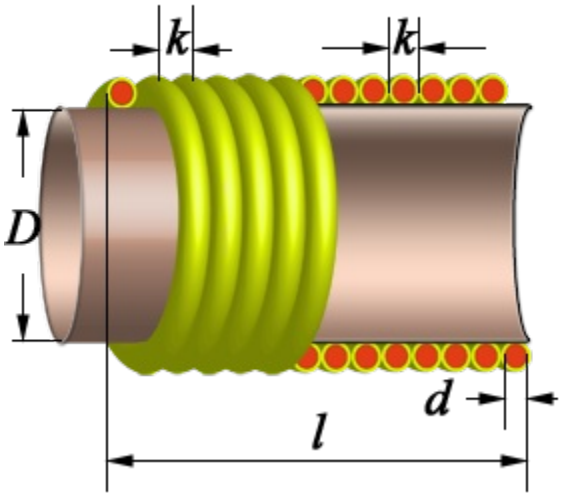
Self capacitance Cs = 0,347 pF
Coil self-resonance frequency Fsr = 916,509 MHz
Coil constructive Q-factor Q = 474
Loss resistance ESR = 0,066 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 100,974 pF
=> Characteristic impedance: ρ = 31 Ohm
=> Equivalent resistance: Re = 10,103 kOhm
=> Bandwidth: 3dBΔf = 155,485 kHz

Input data for LTSpice:
Inductance: 0.100µ

Series resistance: 1.026m
Parallel resistance: 14.826k
Parallel capacitance: 0.347p

× **– 4** - 04.01.2025 10:51
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 56 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

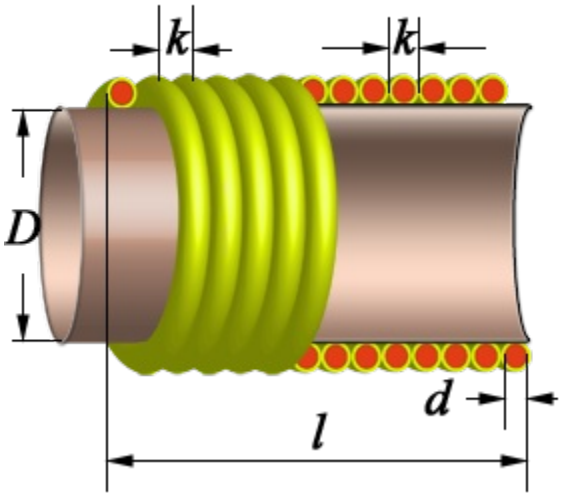
Result:
Number of turns of the coil N = 2,071
Length of wire without leads lw = 7,254 cm
Length of winding l = 5,022 mm
Weight of wire m = 1,149 g
Resistance of the coil Rdc = 0,001 Ohm
Reactance of the coil X = 17,593 Ohm

Self capacitance Cs = 0,378 pF
Coil self-resonance frequency Fsr = 1 209,051 MHz
Coil constructive Q-factor Q = 484
Loss resistance ESR = 0,036 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 180,553 pF
=> Characteristic impedance: ρ = 18 Ohm
=> Equivalent resistance: Re = 5,738 kOhm
=> Bandwidth: 3dBΔf = 153,306 kHz

Input data for LTSpice:
Inductance: 0.056µ
Series resistance: 0.708m
Parallel resistance: 8.491k
Parallel capacitance: 0.378p

× **– 3** - 04.01.2025 10:50
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 62 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

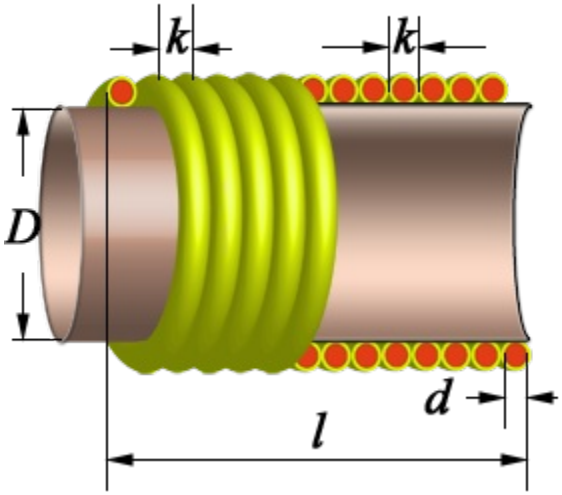
Result:
Number of turns of the coil N = 2,192
Length of wire without leads lw = 7,677 cm
Length of winding l = 5,219 mm
Weight of wire m = 1,216 g
Resistance of the coil Rdc = 0,001 Ohm
Reactance of the coil X = 19,478 Ohm

Self capacitance Cs = 0,372 pF
Coil self-resonance frequency Fsr = 1 158,755 MHz
Coil constructive Q-factor Q = 492
Loss resistance ESR = 0,04 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 163,049 pF
=> Characteristic impedance: ρ = 19 Ohm
=> Equivalent resistance: Re = 6,423 kOhm
=> Bandwidth: 3dBΔf = 151,626 kHz

Input data for LTSpice:
Inductance: 0.062µ
Series resistance: 0.749m
Parallel resistance: 9.566k
Parallel capacitance: 0.372p

× **– 2** - 04.01.2025 10:50
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 75 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

Result:
Number of turns of the coil N = 2,457
Length of wire without leads lw = 8,605 cm
Length of winding l = 5,652 mm
Weight of wire m = 1,362 g
Resistance of the coil Rdc = 0,001 Ohm
Reactance of the coil X = 23,562 Ohm

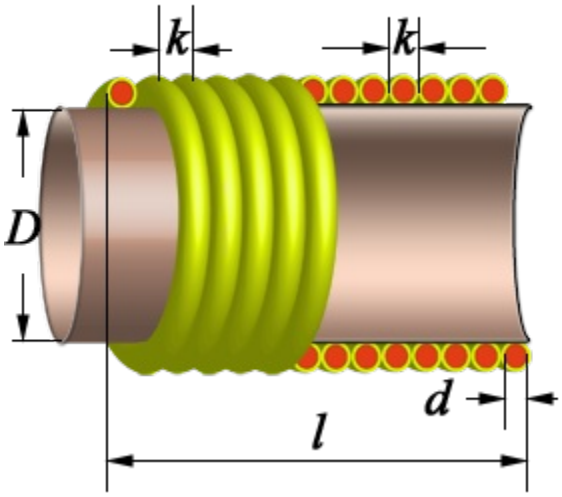
Self capacitance Cs = 0,361 pF
Coil self-resonance frequency Fsr = 1 064,069 MHz
Coil constructive Q-factor Q = 497
Loss resistance ESR = 0,047 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 134,734 pF
=> Characteristic impedance: ρ = 24 Ohm
=> Equivalent resistance: Re = 7,823 kOhm

=> Bandwidth: 3dBΔf = 150,604 kHz

Input data for LTSpice:
Inductance: 0.075µ
Series resistance: 0.839m
Parallel resistance: 11.675k
Parallel capacitance: 0.361p

× **– 1** - 28.12.2024 11:15
Coil64 v2.2.33 - One layer close-winding coil



Input:
Inductance L: 220 nH
Frequency f: 50 MHz
Former diameter D: 9,5 mm
Wire diameter d: 1,5 mm
Wire diameter with insulation k: 1,635 mm
Wire material Mt: Copper

Result:
Number of turns of the coil N = 5,124
Length of wire without leads lw = 17,943 cm
Length of winding l = 10,012 mm
Weight of wire m = 2,841 g
Resistance of the coil Rdc = 0,002 Ohm
Reactance of the coil X = 69,115 Ohm

Self capacitance Cs = 0,337 pF
Coil self-resonance frequency Fsr = 622,581 MHz
Coil constructive Q-factor Q = 442
Loss resistance ESR = 0,155 Ohm

Additional results for parallel LC circuit at the working frequency:
=> Circuit capacitance: Ck = 45,718 pF

=> Characteristic impedance: ρ = 69 Ohm
=> Equivalent resistance: Re = 21,185 kOhm
=> Bandwidth: 3dBΔf = 163,122 kHz

Input data for LTSpice:
Inductance: 0.220µ
Series resistance: 1.751m
Parallel resistance: 30.296k
Parallel capacitance: 0.337p