

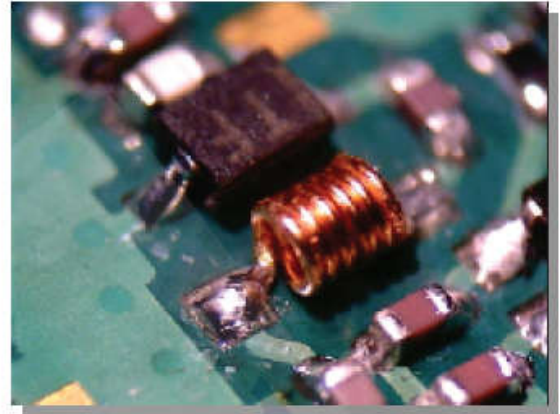
Features

- ◆ RoHS Compliant
- ◆ High Performance, Low Cost
- ◆ Miniature Scale
- ◆ Suitable for High frequency applications
- ◆ Maximum Q
- ◆ Easy Bonding and low sensitivity against humidity

Description

The coil is designed for use in frequency synthesizers.

The leads are solder coated for reliable soldering.

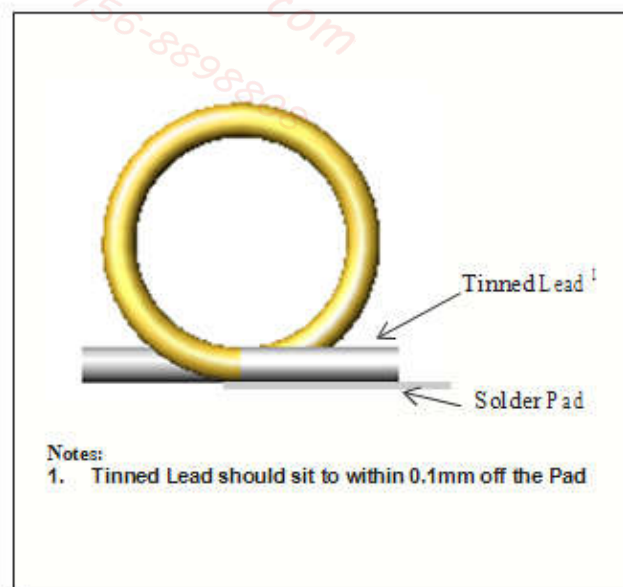


Selection guide for standard coils:

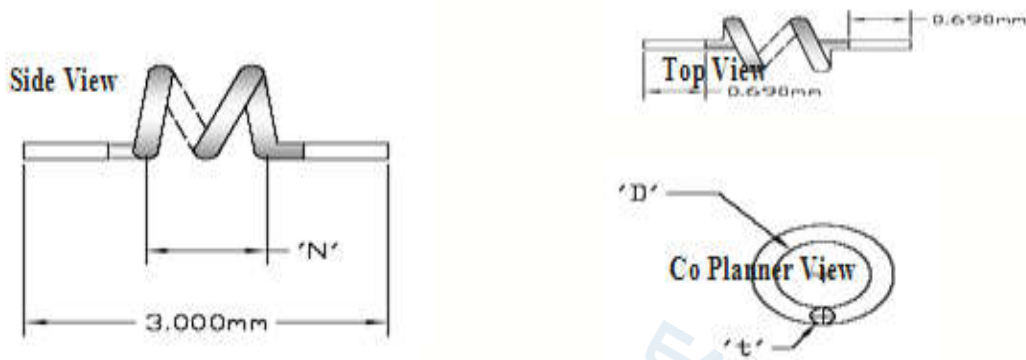
Part Number	Product Specifications	Winding Turns	Wire (mm)	Inductor ID(mm)	Inductance (nH)	Frequency (MHz)	Winding Direction	Coil Footprint
2300309	SC0.2X0.4X1T-3H	1	0.2	0.4	2.0	100	clockwise	Straig
2300308	SC0.2X0.4-2T-3H	2	0.2	0.4	3.3	100	clockwise	Straig
2300280	SC0.2X0.5-1T-3H	1	0.2	0.5	2.2	100	clockwise	Straig
2300281	SC0.2X0.6-1T-3H	1	0.2	0.6	2.4	100	clockwise	Straig
2300282	SC0.2X0.7-1T-3H	1	0.2	0.7	2.6	100	clockwise	Straig
2300283	SC0.2X0.8-1T-3H	1	0.2	0.8	2.9	100	clockwise	Straig
2300284	SC0.2X0.5-2T-3H	2	0.2	0.5	3.8	100	clockwise	Straig
2300285	SC0.2X0.6-2T-3H	2	0.2	0.6	4.5	100	clockwise	Straig
2300286	SC0.2X0.7-2T-3H	2	0.2	0.7	5.1	100	Anti- clockwise	Straig
2300288	SC0.2X0.8-2T-3H	2	0.2	0.8	5.8	100	clockwise	Straig
2300287	SC0.2X0.5-3T-3H	3	0.2	0.5	5.8	100	Anti- clockwise	Straig
2300289	SC0.2X0.6-3T-3H	3	0.2	0.6	6.9	100	Anti- clockwise	Straig
2300290	SC0.2X0.5-4T-3H	4	0.2	0.5	7.8	100	clockwise	Straig
2300291	SC0.2X0.7-3T-3H	3	0.2	0.7	8.2	100	clockwise	Straig
2300292	SC0.2X0.8-3T-3H	3	0.2	0.8	9.5	100	clockwise	Straig
2300293	SC0.2X0.6-4T-3H	4	0.2	0.6	9.6	100	clockwise	Straig
2300294	SC0.2X0.5-5T-3H	5	0.2	0.5	10.0	100	Anti- clockwise	Straig
2300295	SC0.2X0.7-4T-3H	4	0.2	0.7	11.6	100	clockwise	Straig
2300296	SC0.2X0.5-6T-3H	6	0.2	0.5	12.3	100	clockwise	Straig
2300297	SC0.2X0.6-5T-3H	5	0.2	0.6	12.5	100	clockwise	Straig
2300298	SC0.2x0.8-4T-3H	4	0.	0.8	13.7	100	clockwise	Straight
2300299	SC0.2X0.7-5T-3H	5	0.	0.7	15.2	100	clockwise	Straight
2300300	SC0.2X0.6-6T-3H	6	0.	0.6	15.4	100	clockwise	Straight
2300301	SC0.2X0.8-5T-3H	5	0.	0.8	18.1	100	clockwise	Straight
2300302	SC0.2X0.7-6T-3H	6	0.	0.7	18.9	100	clockwise	Straight
2300303	SC0.2X0.8-6T-3H	6	0.	0.8	22.8	100	clockwise	Straight

General	
◆ Elektrisola Product Name	Polysol 155
◆ Elektrisola Product Code	P155
◆ Copper Grade ⇒ Composition of the weight in %	Elektrisola "1B" Cu ≥ 99.90 %
◆ Base Coat ²	Mod. Polyurethane
◆ Bond coat ³	Poly (vinyl butyral) plastic
◆ Standards IEC (including the following norms)	IEC 317-35, IEC 317-2
Electrical Values	
◆ Electric Field Strength acc to IEC 851.5.4.2 (at 20° C, 35% humidity). Information based on Elektrisola-Group	160V/μm 220V
◆ Breakdown Voltage acc to IEC.851.5.4.2 (at 20°C)	
Mechanical Values	
◆ Elongation min. acc to IEC 851.3.3 for 0.05/0.25mm thickness, Grade 1B	≥ 10%/22% 18.15e6 N/m²
Bonding of Wire	
◆ Solvent Bonding Recommended solvent	0.03-0.1mm Methanol
Solderability	
◆ Acc. To IEC 851.4.5 max. seconds at °C for 0.05/0.25 mm Thickness of wire	2s/390°C 3s/390°C

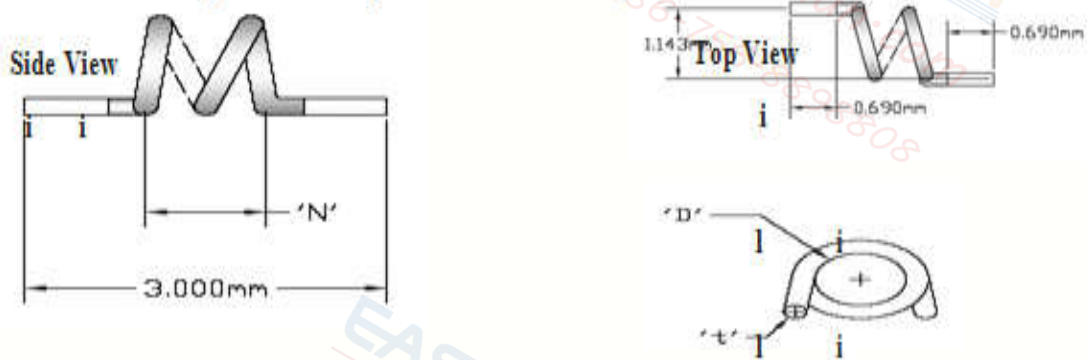
Co-planarity



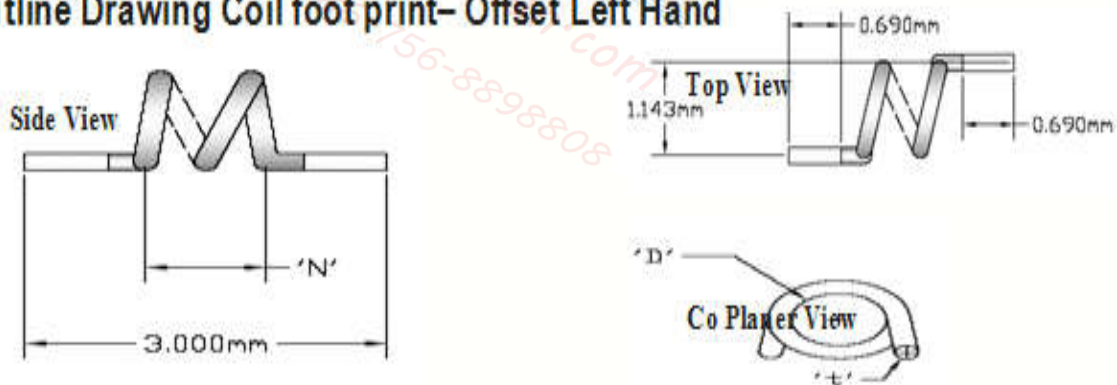
Outline Drawing Coil foot print- Straight



Outline Drawing Coil foot print- Offset Right Hand



Outline Drawing Coil foot print- Offset Left Hand



1. TinPlating: SAC 0307 => Sn 99%, Ag 0.3% & Cu 0.7%, lead free
2. Solder: Sn95.5/Ag4.0/Cu0.5, lead free
3. Tolerance: ± 0.1 mm unless otherwise noted.

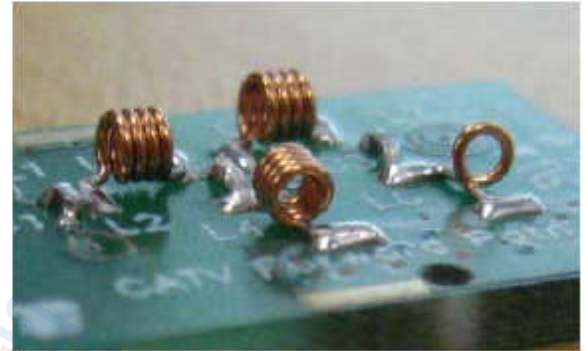
Broadband 90° tuning coil specification

Features

- ◆ RoHS Compliant
- ◆ High Performance, Low Cost
- ◆ Miniature Scale
- ◆ Suitable for High frequency applications
- ◆ Maximum Q
- ◆ Easy Bonding and low sensitivity against humidity

Description

The coils are designed for use in CATV filter applications. The coils are manufactured in an ISO9001 certified facility. The leads are solder coated for reliable soldering.



Selection guide for standard coils:

Part Number	Wire Gauge t (mm) ¹	Inductor Internal Diameter D (mm) ²	Turns N	Coil Winding Direction	Tinned Lead Length Y (mm) ³	Coil Width W (mm) ⁴	Coil Length L (mm) ⁴
1000031435-C03101T	0.3	1.0	1	clockwise	1.0	2.3	3.0
1000031435-C03102T	0.3	1.0	2	clockwise	1.0	2.3	3.0
1000031435-C03103T	0.3	1.0	3	clockwise	1.0	2.3	3.0
1000031435-C03104T	0.3	1.0	4	clockwise	1.0	2.3	3.0
1000031435-C03105T	0.3	1.0	5	clockwise	1.0	2.3	3.0
1000031435-C03106T	0.3	1.0	6	clockwise	1.0	2.3	3.0
1000031435-C03111T	0.3	1.1	1	clockwise	1.0	2.3	3.0
1000031435-C03112T	0.3	1.1	2	clockwise	1.0	2.3	3.0
1000031435-C03113T	0.3	1.1	3	clockwise	1.0	2.3	3.0
1000031435-C03114T	0.3	1.1	4	clockwise	1.0	2.3	3.0
1000031435-C03115T	0.3	1.1	5	clockwise	1.0	2.3	3.0
1000031435-C03116T	0.3	1.1	6	clockwise	1.0	2.3	3.0
1000031435-C03121T	0.3	1.2	1	clockwise	1.0	2.3	3.0
1000031435-C03122T	0.3	1.2	2	clockwise	1.0	2.3	3.0
1000031435-C03123T	0.3	1.2	3	clockwise	1.0	2.3	3.0
1000031435-C03124T	0.3	1.2	4	clockwise	1.0	2.3	3.0
1000031435-C03125T	0.3	1.2	5	clockwise	1.0	2.3	3.0
1000031435-C03126T	0.3	1.2	6	clockwise	1.0	2.3	3.0
1000031435-C04121T	0.4	1.2	1	clockwise	1.0	2.4	3.6
1000031435-C04122T	0.4	1.2	2	clockwise	1.0	2.4	3.6
1000031435-C04123T	0.4	1.2	3	clockwise	1.0	2.4	3.6
1000031435-C04124T	0.4	1.2	4	clockwise	1.0	2.4	3.6
1000031435-C04125T	0.4	1.2	5	clockwise	1.0	2.4	3.6
1000031435-C04126T	0.4	1.2	6	clockwise	1.0	2.4	3.6

1. Tolerance: ± 0.05mm
2. Tolerance: ± 0.1mm
3. Tolerance: +1mm/-0.2mm
4. Tolerance: +0.5mm/-0.2mm

Broadband 90° tuning coil specification

Coil material parameters ¹	
General	
♦ Material ⇒ Composition of the weight in %	Copper Cu ≥ 99.90 % Oxygen = 0.005 - 0.040% (e.g. P 180 G1)
♦ Base Coat ²	Mod. Polyurethane
♦ Standards IEC (including the following norms)	IEC 60317-51, Grade 1B
Electrical Values	
♦ Electric Field Strength acc to IEC 60851.5.4.2 (at 20°C, 35% humidity)	160V/μm
♦ Breakdown Voltage acc to IEC 60851.5.4.2 (at 20°C, 35% humidity)	220V
Solderability	
♦ Max. seconds at °C for 0.25 mm thickness of wire Acc. to IEC 60851.4.5	3s/390°C

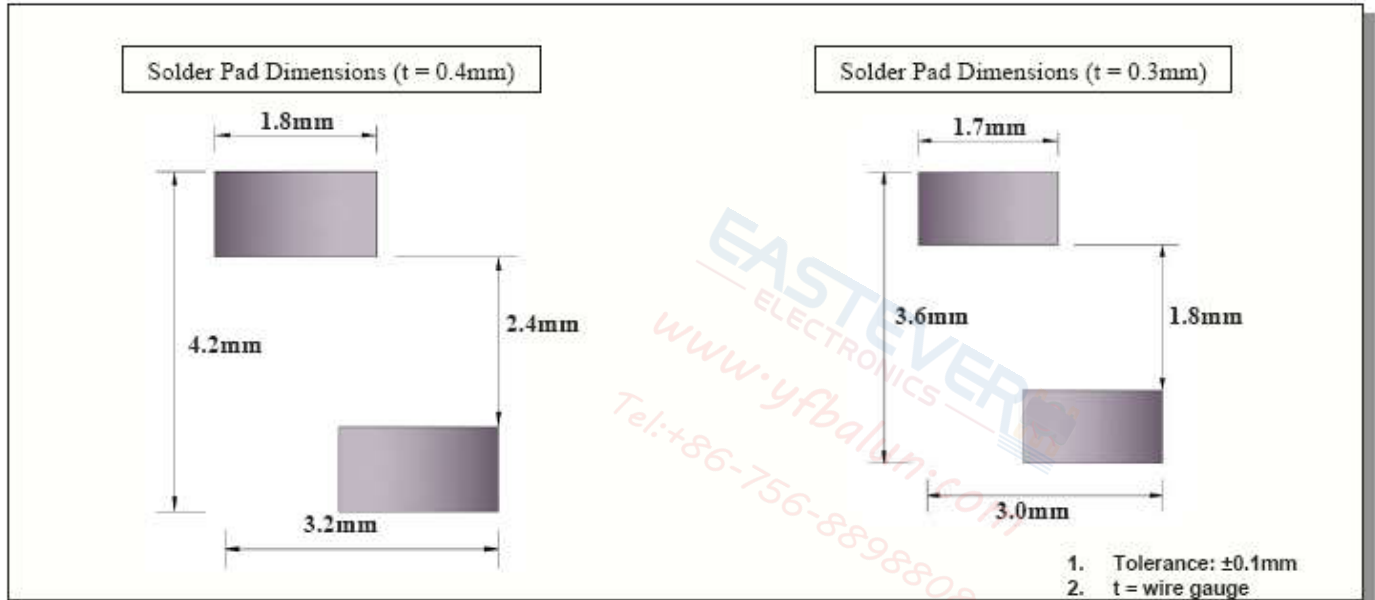
1. Operation of this component above any one of these parameters may cause permanent damage.
2. Primary purpose of coating is to provide protection from scratch or corrosion

Co-planarity



Broadband 90° tuning coil specification

Recommended PCB Layout



Outline Drawing

