

RF & MICROWAVE AIR COILS

High Precision - Controlled Performance

Piconics family of air core micro-miniature coil inductors have been around since the inception of the company. Our application focus is structured towards RF, microwave and millimeterwave frequencies. Our high precision construction methods give the consistency and performance needed in your tuned network and high frequency applications.

Piconics offers a full spectrum of air coils tailored to your needs along with conformal-coated versions for high reliability and chip-mounted versions for easy handling and assembly.

Piconics RF & Microwave Air Coil Inductors provide :

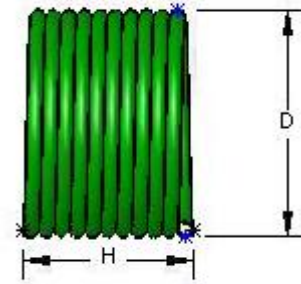
- Precision stripping for repeatable mounting
- Several lead configurations for your circuit
- Variety of wire materials and awgs
- High Q performance of an air coil inductor
- Predictable electrical characteristics

Our strict QC standards on wire selection, lead stripping and coil winding is the difference your electrical designs are looking for. Coupled with a 98% on time delivery rating, Piconics is your primary solution for air coil inductors

Common Applications Include:

Filters, oscillators, mixers, switches, strip-line devices, bias networks, broadband modulators, power supplies and frequency multipliers.

Single-Layer Air Coil Inductance Calculation



$$L = \frac{D^2 N^2}{18D + 40H}$$

L = Inductance in microHenries

N = Number of turns

D = Overall coil diameter in inches
(Form and wire dia. included)

H = Overall length of coil in inches

Attention:

Please see reverse for performance characteristics, lead orientations, mounting options and ordering code.

ISO 9001:2008 Certified



P: 978-649-7501
F: 978-649-9643

TEC *Tect Electronics*
The authorized distributor in the Greater China Region

www.piconics.com

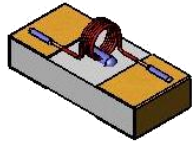
26 Cummings Rd, Tyngsboro, MA 01879

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Rev.A-2009

RF & Microwave Air Coil Specifications

RF & Microwave Air Core Chip Mounted & Conformal Coated



MC-Series

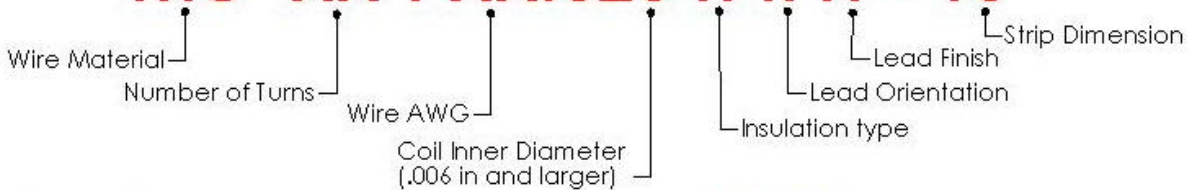
Series	L nH	Q Min	SRF Min GHz	DCR Max Ohms	Mounting Style
MC	8 - 700	21 - 17	4.6 - .65	.16 - 3.4	SMT
S	5 - 330	60 - 20	2.5 - .30	.1 - .5	Leaded



S-Series

Microwave Air Coil Ordering Code

MG XX T XX.020 H R N - 10



Wire Material

M = Copper Wire
MG = Gold Wire
MN = Nickel-Copper Alloy
MK = 5-10 Micro-Inch Gold Plated Copper Wire

Lead Finish

N = None
T = Tinned (.050 to .100 Of The Body Only)
G = Gold plated to 100 uin*
P = Tin Plate (.000 to .050)*
S = Stripped

Insulation Type

H = High Temp (180 °C Or Higher Thermal Class)
S = Standard 155 °C Thermal Class
F = Solderable 105 °C Thermal Class

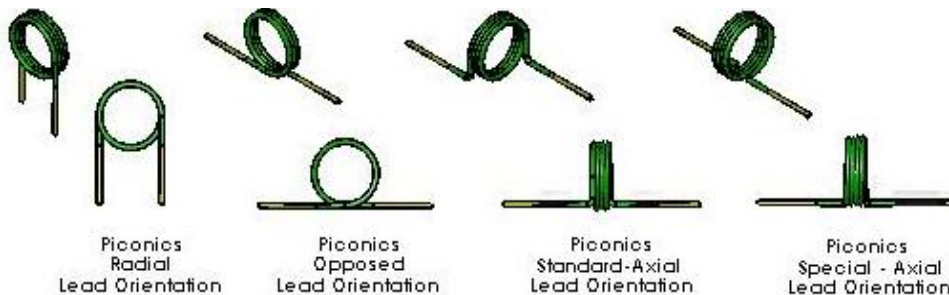
Stripping Dimension

50 = Stripped within .050 inches of the coil body
25 = Stripped within .025 inches of the coil body
10 = Stripped within .010 inches of the coil body*
00 = Stripped To the Body (up to 1/4 turn in)*
Leave Blank if unstripped

Lead Orientation

R = Radial
O = Opposed
A = Axial
X = Special Axial

*Minimum Qty Required for this operation



Check out Piconics Website for in-stock M & MG Air Coil Specs

