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:

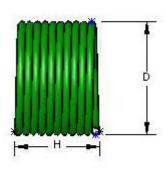
- Precision stripping for repeatable mounting
- > Several lead configurations for your circuit
- > Variety of wire materials and awgs
- **→** High Q performance of an air coil inductor
- Predictable electrical characteristics

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

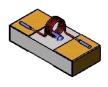




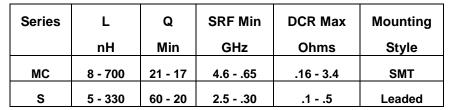


RF & Microwave Air Coil Specifications

RF & Microwave Air Core Chip Mounted & Conformal Coated



MC-Series





Microwave Air Coil Ordering Code



Coil Inner Diameter (.006 in and larger) -

Wire Material M = Copper Wire MG = Gold Wire

MN = Nickel-Copper Alloy

MK = 5-10 Micro-Inch Gold Plated Copper Wire

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

Lead Orientation R = Radial

O = Opposed A = Axial

X = Special Axial

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

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

*Minimum Qty Required for this operation



Piconics

Piconics Opposed Lead Orientation

Piconics Standard-Axial Lead Orientation

Piconics Special - Axial Lead Orientation

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

