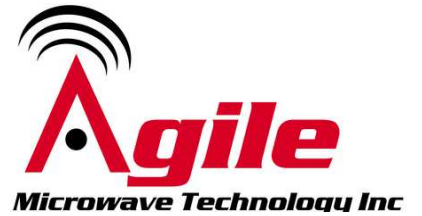


Spiral Inductors

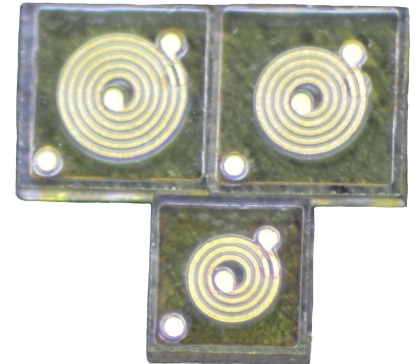
For RF/Microwave Applications

Data Sheet



Features

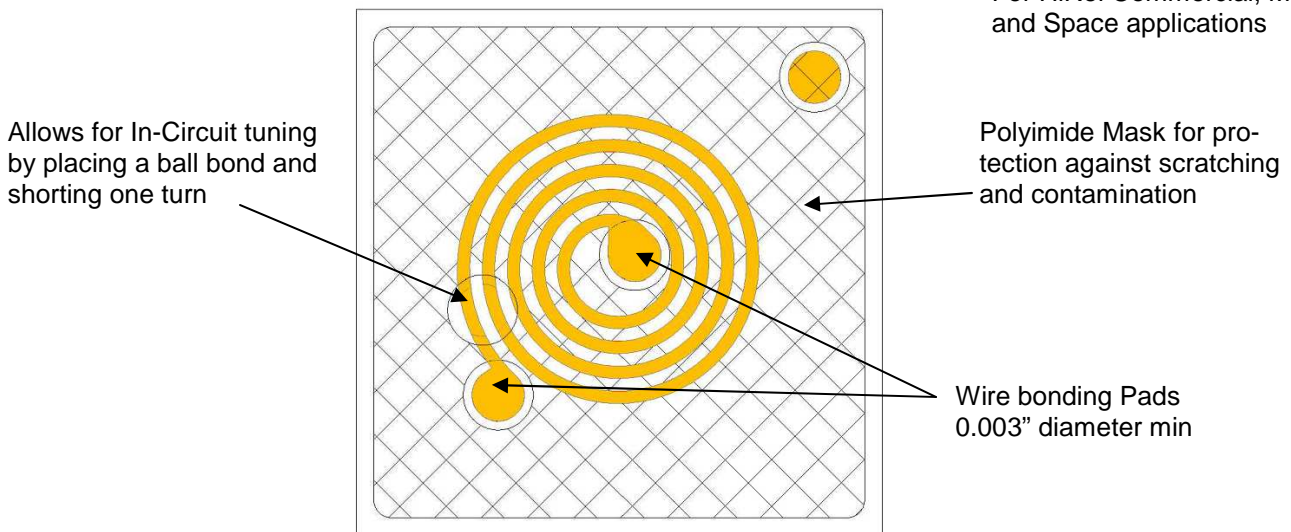
- Extremely High self-resonant Frequency performance
- Hi-Rel Thin-Film Gold construction on Quartz
- Designed, Modeled and Optimized using latest CAD tools for RF/Microwave circuits
- Circular Spiral inductors provide better high frequency performance over rectangular designs
- Quartz substrate reduces losses by decreasing series resistance, provide high Q, and much higher self-resonant frequencies
- Polyimide Protective coating over coil
- Low parasitic capacitance



Applications

- RF Tuning Circuits
- Gain matching
- RF choke for DC biasing

For HiRel Commercial, Military and Space applications



Patent Pending

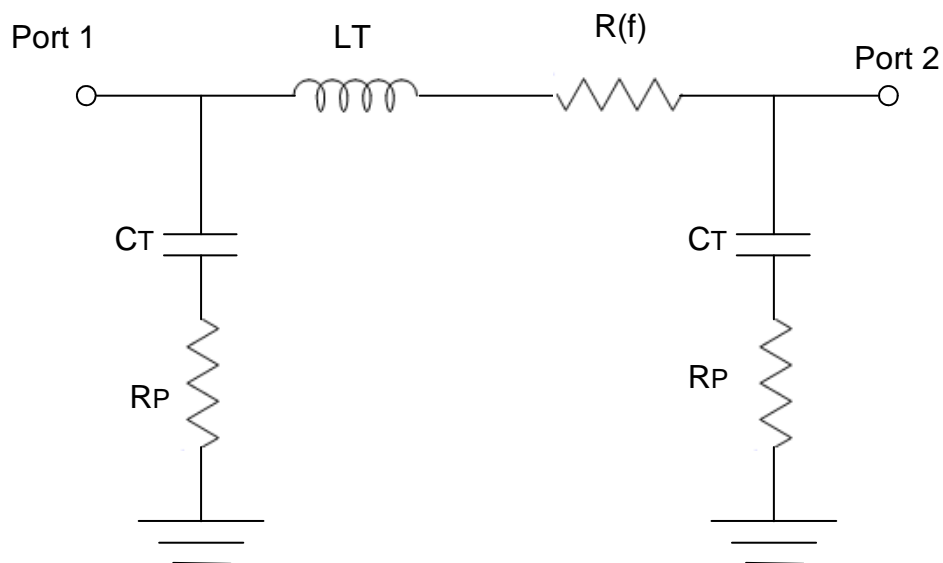
Part Number	Symbol	Units	MIN	MAX
Operating Temperature	T_{MO}	° C	-55	+125
Storage Temperature	T_{MS}	° C	-65	+150

Spiral Inductors are Stock items and can be shipped within 24 hrs

Part Number	Size	Turns	Inductance (nH)	Q
AMT-I0172	0.025 X 0.025	3.5	4.2	8
AMT-I0173	0.030 X 0.030	4.5	11.4	10
AMT-I0174	0.030 X 0.030	5.5	15.5	12

Please contact factory for other Inductance values and custom configurations

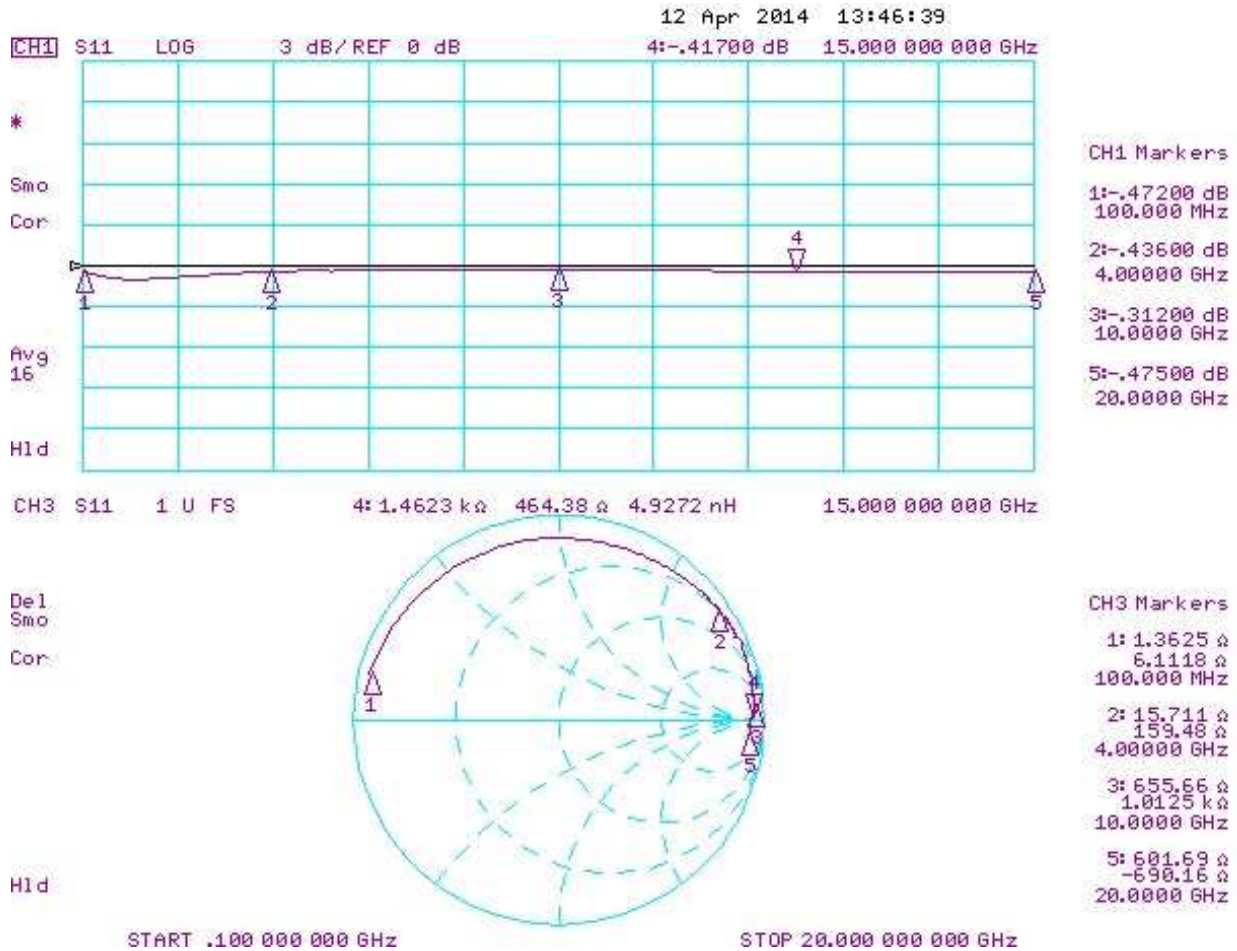
Two port lumped-element equivalent circuit for spiral inductor



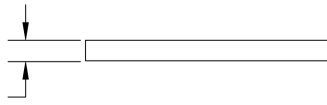
Measured Frequency Response up to 20 GHz

Measured Plot of 4.5 Turn Model AMT-I0173

Inductor mounted in a housing with SMA connector, Center pad attached to 0.015" pin with 0.001" gold wire and outer pad attached to the ground with 0.001" gold wire

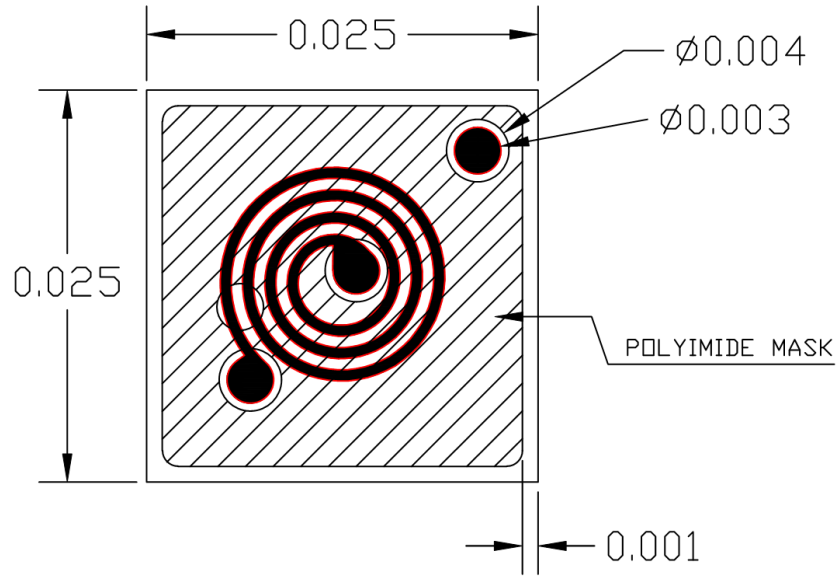


Outline: Dimensions in inches

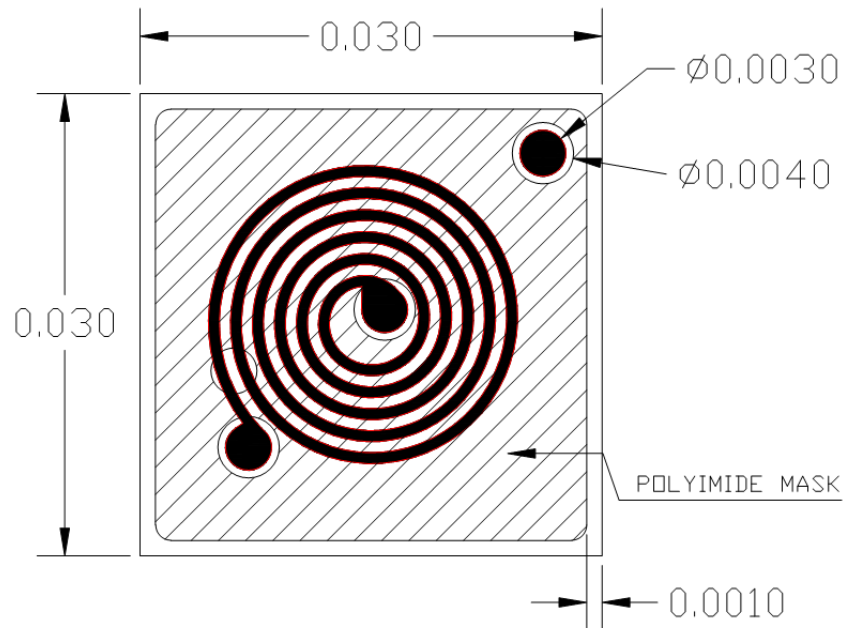


Thickness: 0.010" for all Inductors
Bottom Side: No Metallization

Outline: AMT-I0172



Outline: AMT-I0173 & AMT-I0174



Contact us for custom configurations and special requirements.

Our highly experienced team of engineers can quickly identify and implement innovative solutions using latest technology to improve performance and reduce cost.

- Add additional functionality can be added
- Custom Pad size, thickness and metallizations are available

Agile Microwave Technology Inc is the logical choice for all your commercial or military RF/Microwave components/module requirements.

The Inductance values are typical only and may vary significantly depending on wire bond lengths and Inductor attach.

Contact Information:

**101 Bloomingdale Road
Hicksville, NY 11801
Phone: (516) 931-1760
Fax: (212) 374-1153**



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