SMD RF Manual Tunable Inductor
2613

- ◆ **Operated frequency: 20~330 MHz**
- ◆ **Q value: 84(no core) , 54(full core)**
- ◆ **Inductance tuning range: 118 to 156(nH)**
- ◆ **Core material: Aluminum**
- ◆ **SRF: 520MHz**
- ◆ **Operating temperature: -40　~+125**
- ◆ **Rotation times(min): 100**

Features

- ■ SMD package
- ■ High temperature resistance, operating reliably from -40 ~125　and in other harsh environment
- ■ Hermetic microstrip circuit, reliable and stable over temperature and humidity changes.
- ■ High Q value, linear tunable, available in increasing or decreasing inductance value
- ■ Built with advanced multi-layer processing, high consistence and high reliabilit -y in manufacturing, contributing to good consistence in tuning resonant circuit
- ■ Anti-interference with non-magnetic core, no interference with other devices
- ■ Small size: 5× 5× 2.5 (mm)
- ■ Termination leads: RoHS compliant, tin or gold over copper
- ■ Low cost, high performance

Applications

- ● Super Regenerative Receiver Module
- ● RF Impedance Matching
- ● Tunable Antennas
- ● Tuning Resonant Circuit
- ● Tunable Filter
- ● Phase Shifter
- ● Phased Array Radar
- ● MRI(Magnetic Resonance Imaging)
- ● NMR(Nuclear Magnetic Resonance)
- ● Crystal Oscillator
- ● Broadband Antenna

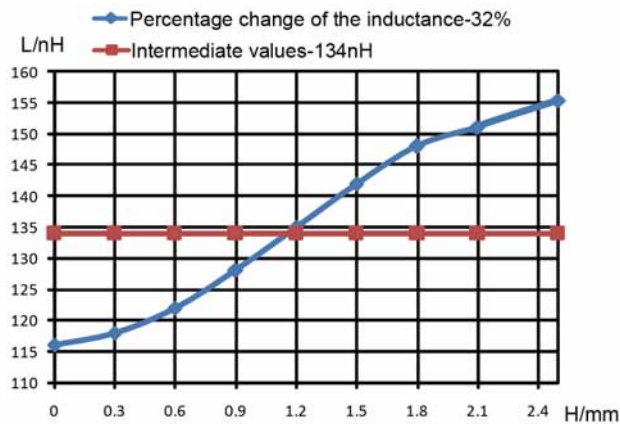## Characteristic

Typical Q and L vs frequency
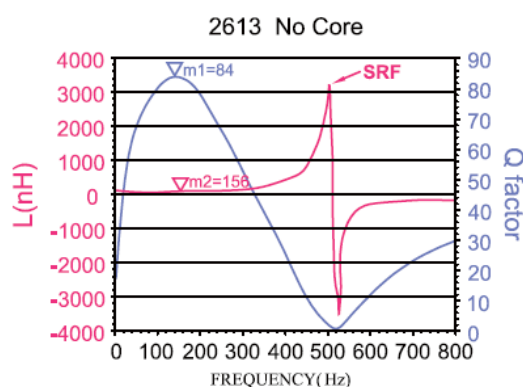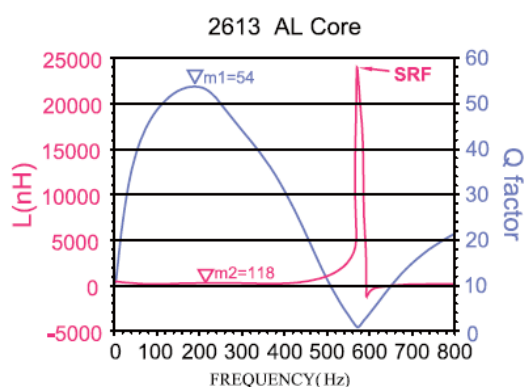
	No core		At L max		At L min		Freq at max	Freq Range	No core SRF	Irms
	L(nH)	Qmin	L(nH)	Qmin	L(nH)	Qmin	Q (MHz)	at 1/2 Qmax	min(MHz)	(A)
2613	156	84	156	84	118	54	160	20~330	520	1.4

Notes:

1. Operating frequency is based on the half of the maximum Q value.

Inductance VS The height of the core rotation
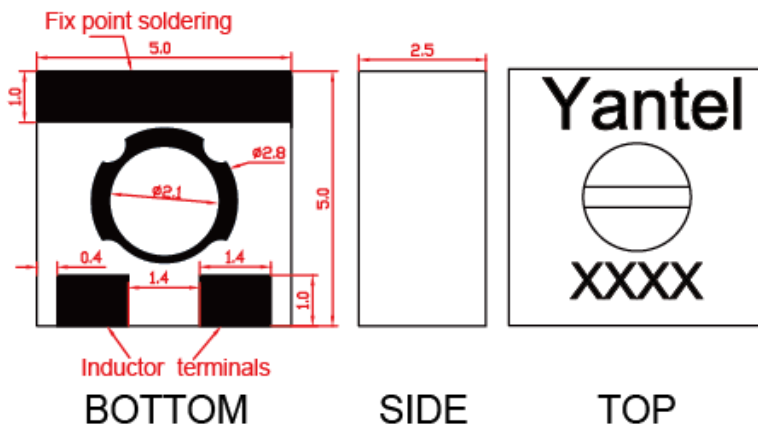

Notes

1. H represents the height of Al core rotation, H max=2.5mm.
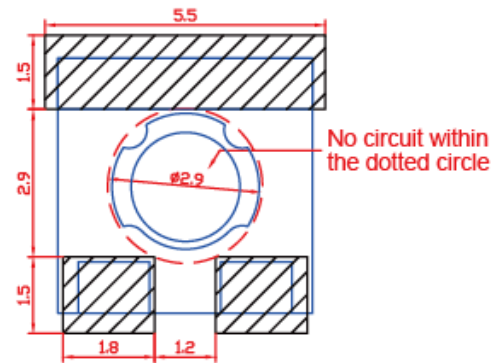2. Inductance changes around the intermediate value.

Package Outlines

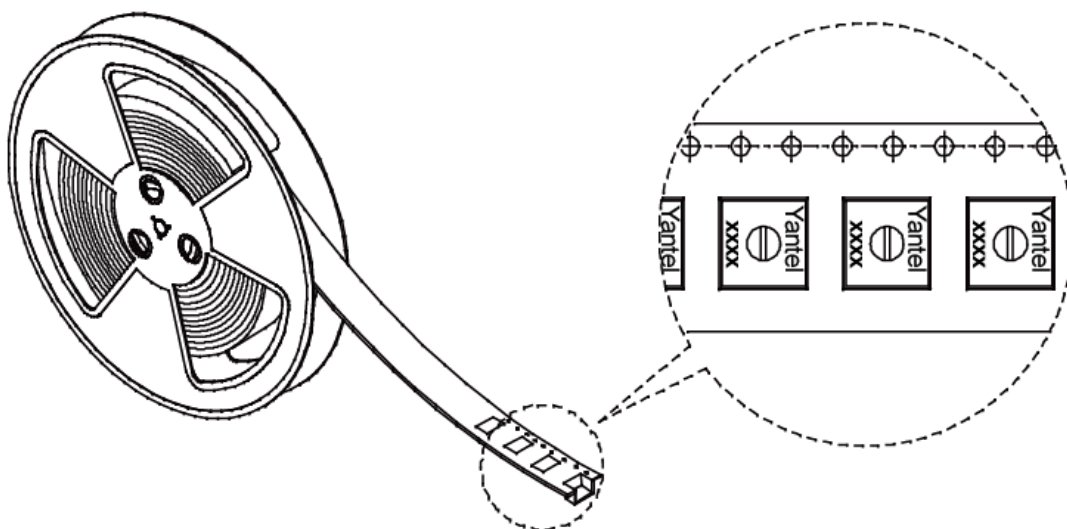All dimensions shown in mm unless stated otherwise

Recommended Layout

All dimensions shown in mm unless stated otherwise

No circuit within the dotted circle

Tape and Reel Drawing