# SMD RF Manual Tunable Inductor

◆ Operated frequency: 20~260 MHz
 ◆ Q value: 79(no core), 51(full core)

**♦** Inductance tuning range: 184 to 249(nH)

**♦** Core material: Aluminum

♦ SRF: 400MHz

◆ Operating temperature: -40 ~+125

♦ Rotation times(min): 100

#### **Features**

2615

- 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:  $5 \times 5 \times 2.5$  (mm)
- Termination leads: RoHS compliant, tin or gold over copper
- Low cost, high performance

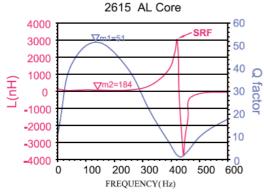
# Vantel 2615

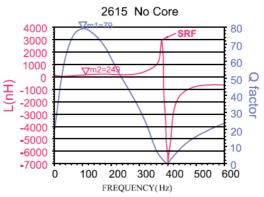
# **Applications**

- 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





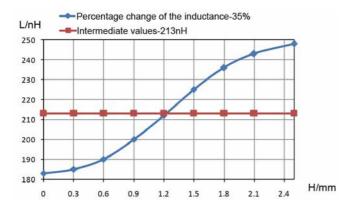
型号	No core		At L max		At L min		Freq at max	Freq Range	No core SRF	Irms
	L(nH)	Qmin	L(nH)	Qmin	L(nH)	Qmin	Q (MHz)	at 1/2 Qmax	min(MHz)	(A)
2615	249	79	249	79	184	51	120	20~260	400	1.3

#### **Notes:**

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

# 2615 SMD RF Manual Tunable Inductor Patent product

#### Inductance VS The height of the core rotation



#### **Notes**

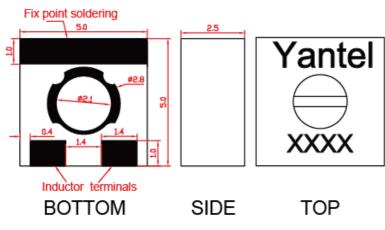
- H represents the height of Al core rotation, H max=2.5mm.
- 2. Inductance changes around the intermediate value.

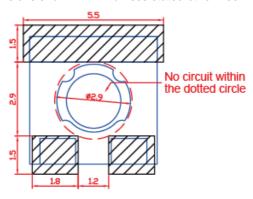
# **Package Outlines**

All dimensions shown in mm unless stated otherwise

# **Recommended Layout**

All dimensions shown in mm unless stated otherwise





### **Tape and Reel Drawing**

