

# 1333 SMD RF Manual Tunable Inductor

Patent product

# SMD RF Manual Tunable Inductor 1333

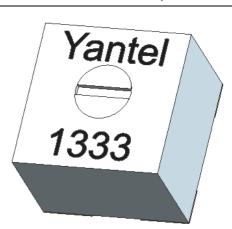
- Operated frequency:20~340 MHz
- ٠ Q value:83(no core), 48(full core)
- Inductance tuning range: 129 to 175(nH)
- Core material: Aluminum
- SRF: 520MHz
- **Operating temperature: -40** ~+125
- Rotation times(min): 100

### 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 reliabili -y in manufacturing, contributing to good consistence in tuning resonant circui
- Anti-interference with non-magnetic core, no interference with other devices
- Small size:  $4.2 \times 4.2 \times 3(mm)$
- Termination leads: RoHS compliant, tin or gold over copper
- Low cost, high performance -

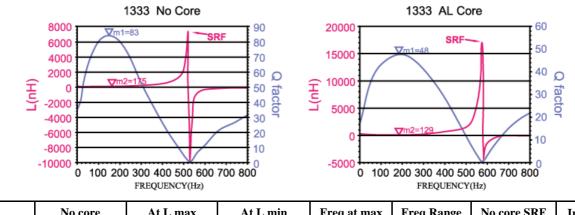
Typical Q and L vs frequency

Characteristic



# 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**



	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)
	1333	175	83	175	83	129	48	140	20~340	520	1.7

#### Notes:

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

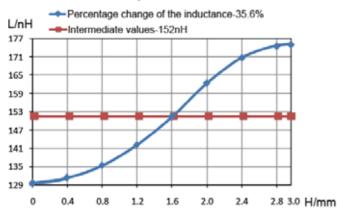
#### Yantel Corporation

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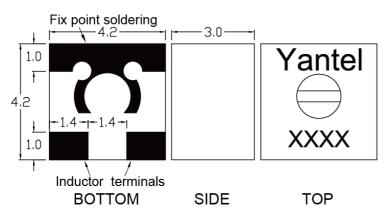
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#### Inductance VS The height of the core rotation



## **Package Outlines**

All dimensions shown in mm unless stated otherwise

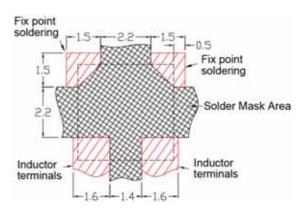


## Notes

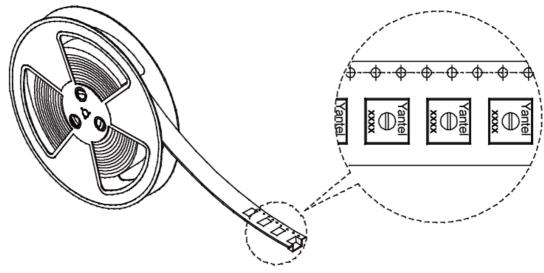
- H represents the height of Al core rotation, H max=3mm.
- 2. Inductance changes around the intermediate value.

## **Recommended Layout**

All dimensions shown in mm unless stated otherwise



# Tape and Reel Drawing



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 For detailed performance specs & shopping online see Yantel web site : <a href="http://www.yantel-corp.com">www.yantel-corp.com</a>