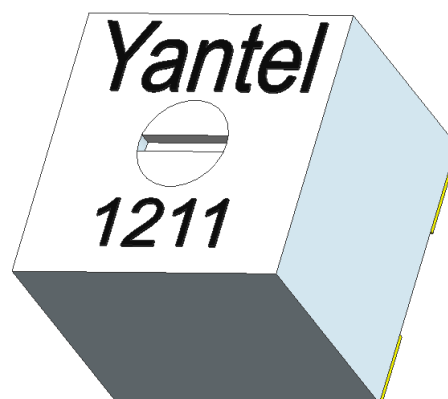


Variable RF Inductor 1211

- ◆ Operated frequency: 280~4800 MHz
- ◆ Q value: 130(no core) , 93(full core)
- ◆ Inductance tuning range: 3.37 to 4.1(nH)
- ◆ Core material: Aluminum
- ◆ SRF: 6.4 GHz
- ◆ 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.
- Excellent RF performance, operating from 30MHz to 6GHz.
- High Q value, linear tunable, available in increasing or decreasing inductance value
- Built with advanced multi-layer processing, high consistence and high reliability in manufacturing, contributing to good consistence in tuning resonant circuit
- Anti-interference with non-magnetic core, no interference with other devices
- Small size: 3×3×2.5(mm)
- Termination leads: RoHS compliant, tin or golden 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

Part No.	No core		At L max		At L min		Freq at max Q (MHz)	Freq Range at 1/2 Qmax	No core SRF min(MHz)	Irms (A)
	L(nH)	Qmin	L(nH)	Qmin	L(nH)	Qmin				
1211	4.1	130	4.1	130	3.37	93	2100	280~4800	6400	1.7

Notes:

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

Percentage change of the inductance-21%

Intermediate values-3.84nH

H/mm	L/nH
0	3.37
0.5	3.58
1.0	3.94
1.5	4.04
2.0	4.08
2.5	4.10

1. H represents the height of Al core rotation, $H_{max}=2.5\text{mm}$.
2. Inductance changes around the intermediate value.

Technical drawing of a mechanical part with dimensions and a note:

- Top view: A rectangle with a width of 3,4 and a height of 1,2. A dashed red circle with diameter $\varnothing 1,2$ is centered on the bottom edge.
- Side view: A rectangle with a width of 1,1 and a height of 1,2. A dashed red circle with diameter $\varnothing 1,2$ is centered on the bottom edge.
- Note: "No circuit allowed within the circular area"

The diagram illustrates the Vantel tape reel and its label layout. On the left, a reel of tape is shown with a label strip extending from it. A dashed circle highlights a section of the label strip, which is then shown in a larger, detailed view on the right. This detailed view shows a label strip with three rows of labels. The top row contains five circular labels with a cross symbol. The middle row contains three rectangular labels, each with the text 'Yantel' and 'xxxx' below it. The bottom row contains three rectangular labels, each with the text 'Yantel' and 'xxxx' below it. The labels are arranged in a grid pattern.