

# 1323 Variable RF Inductor Patent pending

# Variable RF Indctor 1323

- ♦ Operated frequency: 1700 MHz
- Q value: 90(no core) , 71(full core)
- Inductance tuning range: 8.1 to 10.2(nH)
- Core material: Aluminum
- ♦ SRF: 3.2 GHz
- ♦ Operating temperature: -40 ~+125
- **•** Rotation times(min): 100

## Features

- SMD package, able to be mounted or soldered on the PCB.
- High temperature resistant, operating temperature:
  -40 ~+125 .
- Keep excellent & stable performance at high temperature.
- Operated in RF frequency band.
- High Q value.
- Good air tightness to realize high Q value.
- Small size: 4.2 × 4.2 × 3(mm).
- Easy to adjust.
- Core material: Aluminum or Ferrite.
- Termination: RoHS compliant tin over copper.

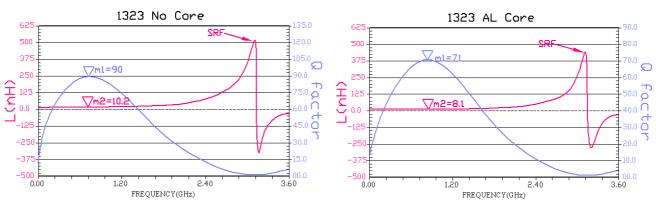
## Characteristic

Typical Q and L vs frequency



## Applications

- 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



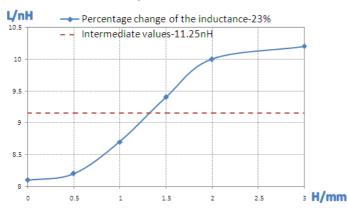
Part No.	No core		At L max		At L min		Freq	No core SRF	Irms
	L(nH)	Q min	L(nH)	Q min	L(nH)	Q min	(MHz)	min(MHz)	(A)
1323	10.2	90	10.2	90	8.1	71	1700	3200	2.1

#### Notes:

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

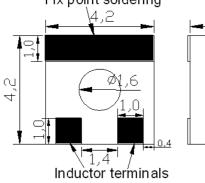


#### Inductance VS The height of the core rotation



## **Package Outlines**

All dimensions shown in mm unless stated otherwise Fix point soldering

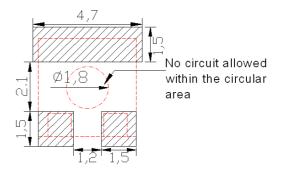


### Notes

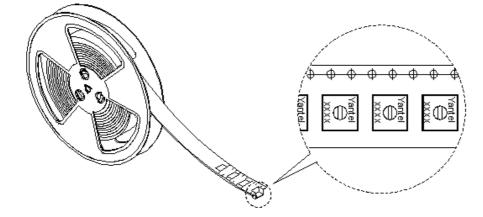
- H represents the height of Al core rotation, H max=3mm.
- 2. Inductance changes around the intermediate value.

## **Recommended Layout**

All dimensions shown in mm unless stated otherwise



## **Tape and Reel Drawing**



3,0