

# 2423 Variable RF Inductor Patent pending

# Variable RF Indctor 2423

- ♦ Operated frequency: 1400 MHz
- Q value: 86(no core) , 69(full core)
- Inductance tuning range: 10.7 to 12.6(nH)
- Core material: Aluminum
- ♦ SRF: 2.24 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:  $5 \times 5 \times 3$ (mm).
- Easy to adjust.
- Core material: Aluminum or Ferrite.
- Termination: RoHS compliant tin over copper.

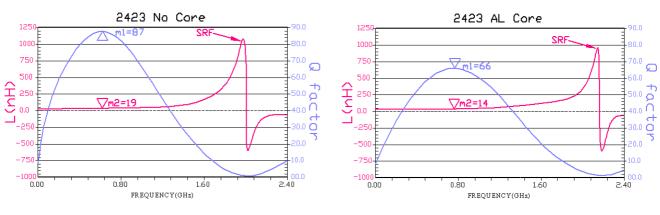
# Characteristic

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



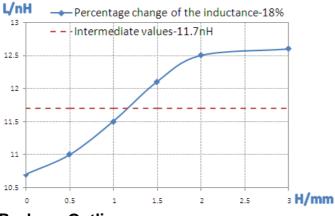
Part No.	No core		At L max		At L min		Freq	No core SRF	Irms
rait NO.	L(nH)	Q min	L(nH)	Q min	L(nH)	Q min	(MHz)	min(MHz)	(A)
2423	12.6	86	12.6	86	10.7	69	1400	2240	3.5

#### Notes:

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

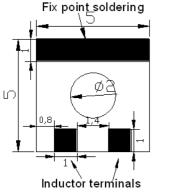


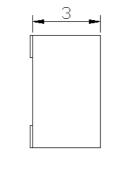
#### Inductance VS The height of the core rotation



#### **Package Outlines**

All dimensions shown in mm unless stated otherwise



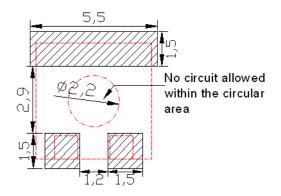


# Notes

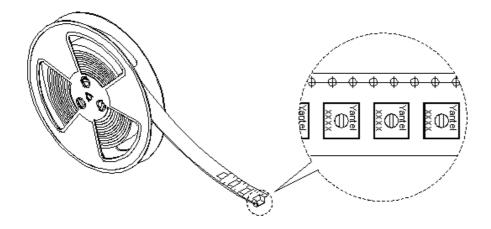
- H represents the height of Al core rotation, H max=3mm.
- 2. Inductance changes around the intermediate value.

## **Recommended Layout**

All dimensions shown in mm unless stated otherwise



# **Tape and Reel Drawing**



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