

Variable RF Inductor

2427

- ◆ Operated frequency: 500 MHz
- ◆ Q value: 75(no core) , 58(full core)
- ◆ Inductance tuning range: 45 to 54(nH)
- ◆ Core material: Aluminum
- ◆ SRF: 1000 MHz
- ◆ Operating temperature: -40 ~+125
- ◆ Rotation times(min): 100



Features

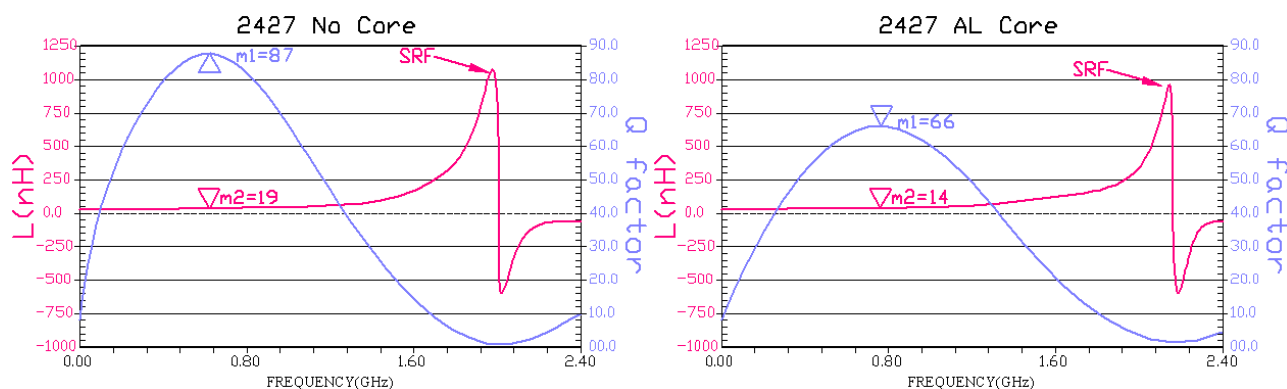
- SMD package, able to be mounted or soldered on the PCB.
- High temperature resistant, operating temperature: -40 ~+125 .
- Keep excellent & stable performance at high temperature.
- Operated in RF frequency band.
- High Q value.
- Good air tightness to realize high Q value.
- Small size: 5 × 5 × 3(mm).
- Easy to adjust.
- Core material: Aluminum or Ferrite.
- Termination: RoHS compliant tin over copper.

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

Characteristic

Typical Q and L vs frequency

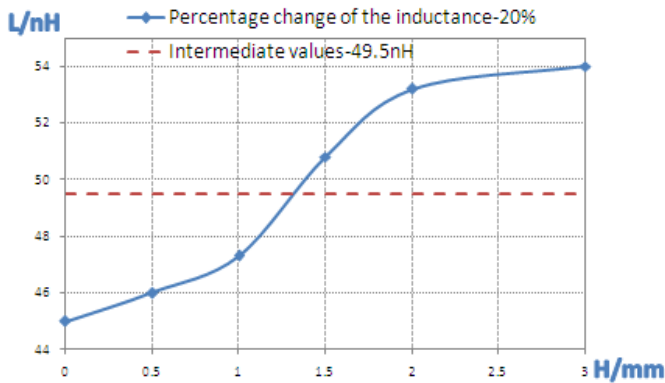


Part No.	No core		At L max		At L min		Freq (MHz)	No core SRF min(MHz)	Irms (A)
	L(nH)	Q min	L(nH)	Q min	L(nH)	Q min			
2427	54	75	54	75	45	58	500	1000	3.4

Notes:

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

Inductance VS The height of the core rotation

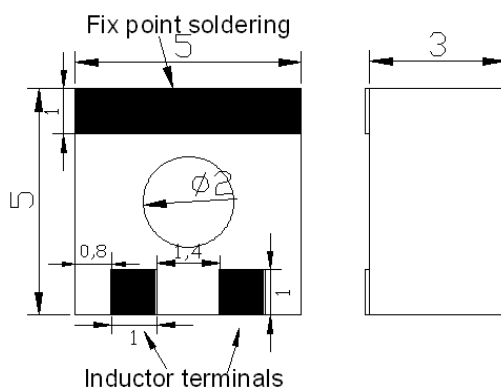


Notes

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

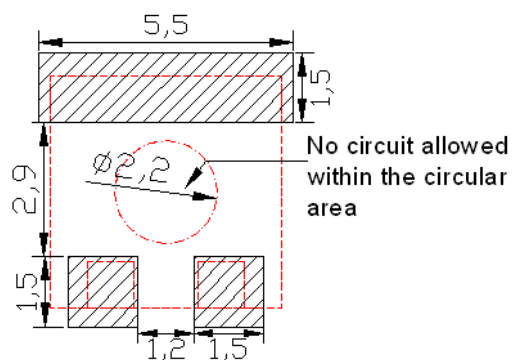
Package Outlines

All dimensions shown in mm unless stated otherwise



Recommended Layout

All dimensions shown in mm unless stated otherwise



Tape and Reel Drawing

