

# Variable RF Indctor 1227

♦ Operated frequency: 800 MHz

◆ Q value: 66(no core), 55(full core)

**♦** Inductance tuning range: 26 to 29.5(nH)

**♦** Core material: Aluminum

◆ SRF: 1600 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:  $3 \times 3 \times 3$  (mm).

Easy to adjust.

Core material: Aluminum or Ferrite.

Termination: RoHS compliant tin over copper.

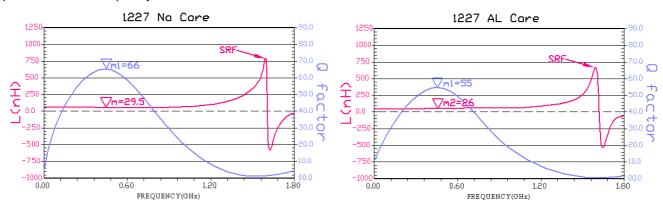
# Yantel 1227

# **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



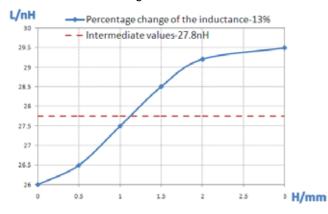
Part No.	No core		At L max		At L min		Freq	No core SRF	Irms	
	L(nH)	Q min	L(nH)	Q min	L(nH)	Q min	(MHz)	min(MHz)	(A)	
1227	29.5	66	29.5	66	26	55	800	1600	1.4	

#### **Notes:**

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



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

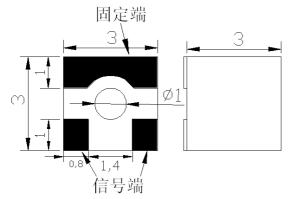


#### **Notes**

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

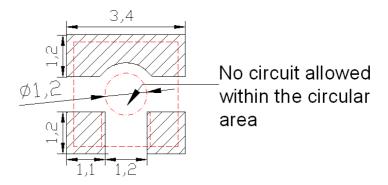
# **Package Outlines**

All dimensions shown in mm unless stated otherwise



# **Recommended Layout**

All dimensions shown in mm unless stated otherwise



### **Tape and Reel Drawing**

