

# TC0502HF

NFC SMD antenna  
5.4x2.8x2.85mm  
NFC ANTENNAS



## FEATURES

This component is an SMD ferrite antenna suitable for signal reception/transmission at 13.56MHz.

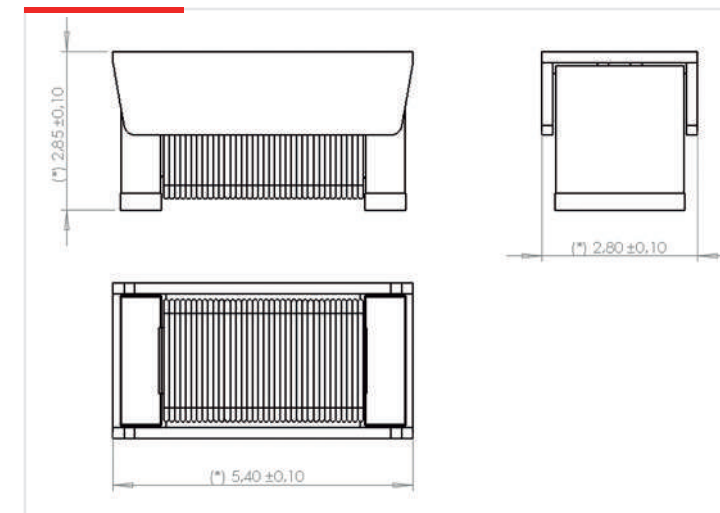
TC0502HF is a highly sensitive and compact solution specially designed for those NFC applications where size of components is critical. TC0502HF series is offered with 2.0 and 4.7 µH (@13,56MHz) inductance values and can be custom according to customer's specification.

## 01 CHARACTERISTICS

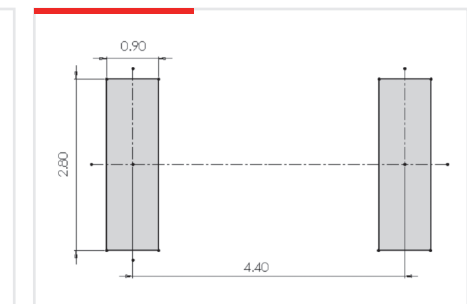
- › This component is functional to 13.56MHz (NFC applications)
- › Can be used in RFID applications with ISO15693 (vicinity: I-Code), ISO 14443A&B (proximity: MIFARE) interface, ISO 18092 and Felica
- › Very small size: 5.2x2.4x2.7mm
- › Good mechanical performance
- › Very stable electrical properties in full operational operative range (-40°C +125°C)
- › Wire: H, 125°C solderable.
- › Terminals: Ag-Ni-Sn100
- › Max. Operating Temperature: +125°C
- › Suitable for Pick&Place SMD assembly

## 02 SPECIFICATIONS

### DIMENSIONS (mm)



### RECOMMENDED PAD-LAYOUT



### ELECTRICAL SPECIFICATIONS

	L (mH)	Q Min	Cres (pF)	SRF (MHz) Min	DRC (Ω)Max	Dimensions (mm) Max
TC0502HF-0002K	2.0 ± 10%	16	68	25	0.935	5.2 x 2.4 x 2.7
TC0502HF-00047K	4.7 ± 10%	18	29	25	1.540	5.2 x 2.4 x 2.7

Inductance, Q factor, DCR and SRF measured with an LCR meter HP 4887A 5.2x2.4x2.7mm MAX