

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.

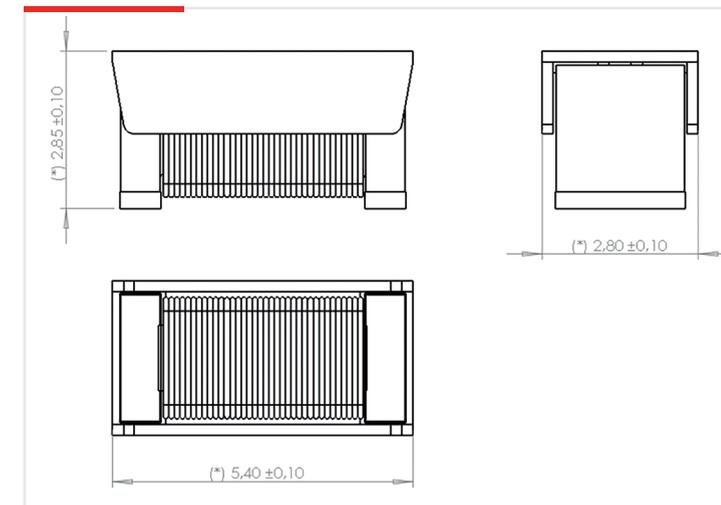
TC0502HF is a highly sensitive and compact solution specially designed for those NFC applications where size of components is critical. TC0502HF series is offered with 2.0 and 4.7 μH (@13.56MHz) inductance values and can be custom according to customer's specification.

01 CHARACTERISTICS

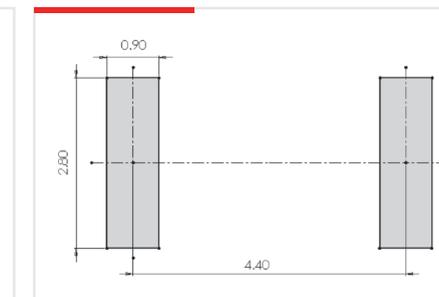
- › This component is functional to 13.56MHz (NFC applications)
- › Can be used in RFID applications with ISO15693 (vicinity: I-Code), ISO 14443A&B (proximity: MIFARE) interface, ISO 18092 and Felica
- › Very small size: 5.2x2.4x2.7mm
- › Good mechanical performance
- › Very stable electrical properties 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 | DCR (Ω) Max | Dimensions (mm) Max |
|-----------------|---------------|----------|--------------|------------------|----------------------|------------------------|
| TC0502HF-0002K | 2.0 \pm 10% | 16 | 68 | 25 | 0.978 | 5.2 x 2.4 x 2.7 |
| TC0502HF-00047K | 4.7 \pm 10% | 18 | 29 | 25 | 1.430 | 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