

SPECIFICATION

Part No. : **FXT.01**

Product Name : Flexible PCB Near-Field Communications Tag
Antenna

Feature : 13.56MHz
Peel and Stick Adhesive Backing
Communicates out to 5 cm to Reader Antenna
RoHS Compliant



I. Introduction

Taoglas has developed a standard NFC (Near Field Communications) tag antenna for use with in mobile device and other applications. This standard design is matched for optimal performance with typical NFC chipsets. The antenna is dimensioned to provide interrogation capability out to 5 cm. distance. This standard antenna is manufactured in a flexible circuit board (PCB) form factor. The flex PCB design provides a flexible NFC tag that can be adhered to the plastic enclosure of the customer device for ease of installation.

With NFC tags being commonly attached to the battery of mobile devices, the NFC tag can be customized with a ferrite layer to provide isolation from the battery or other components in the device the tag is integrated in.

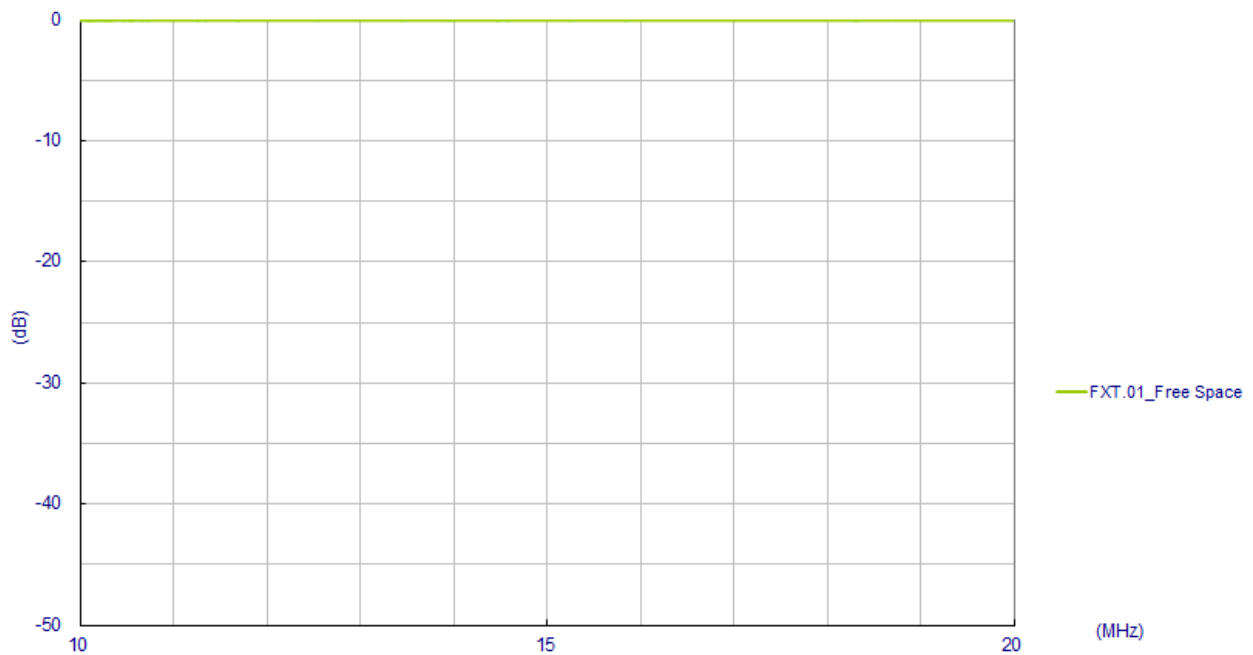
II. Specification Table

Flexible PCB Near-Field Communications Reader Antenna		
Frequency	13.56	MHz
Return Loss	≥ 10	dB
Polarization	Linear	
Impedance	50	Ohm

MECHANICAL	
Antenna Dimensions	53.3mm x 36.8mm
RoHS Compliant	Yes
Adhesive	3M 467
ENVIRONMENTAL	
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

III. Antenna Characteristics (Free Space)

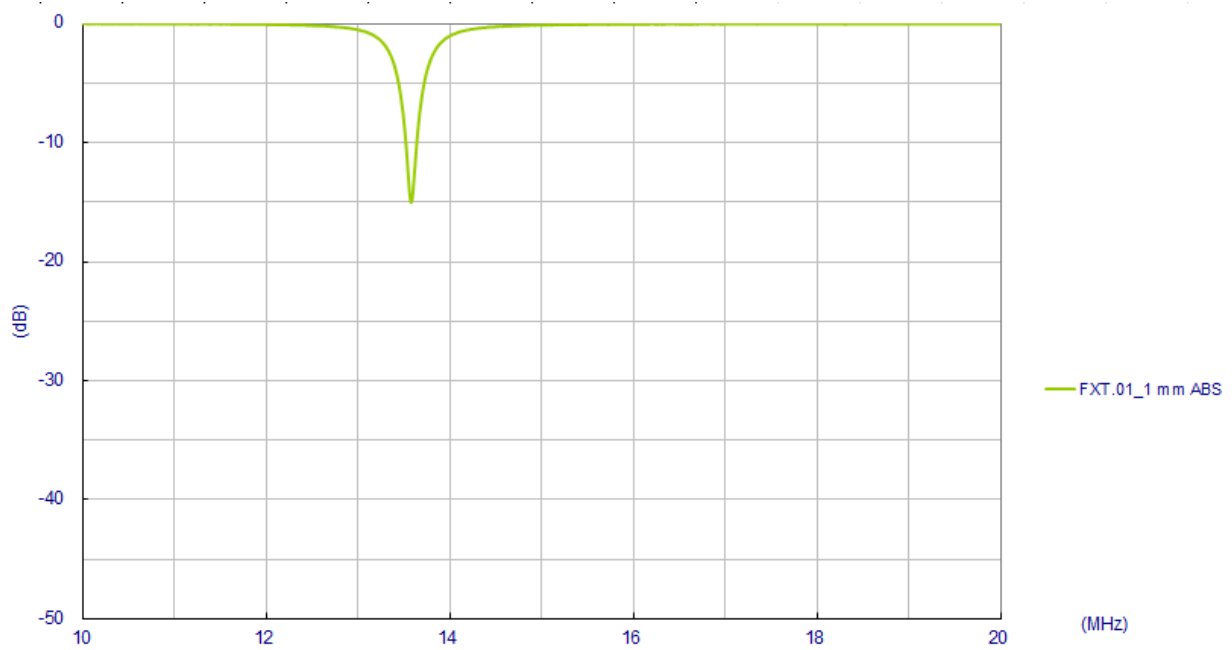
III.1. Return Loss



IV. Antenna Characteristics (on 1mm ABS)



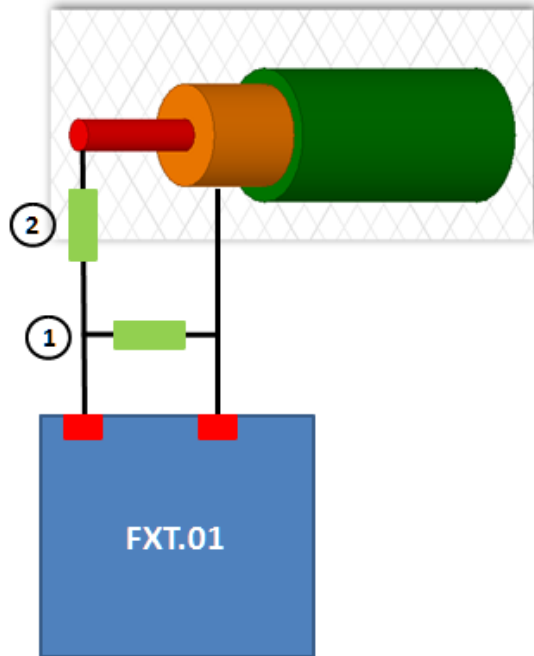
IV.1. Return Loss



IV.2. Smith Chart



IV.3. Matching



1	18 pF
2	12 pF

V.Mechanical Drawing

