NFC 13.56MHz Antenna with IPEX Connector

50.0 x 35.0 x 1.0mm

ANFCA-5035-A01-IPEX

Pb **RoHS/RoHS II compliant**

Moisture Sensitivity Level (MSL) – MSL 1

FEATURES:

- Ultra thin flexible antenna structure
- Peel and Stick antenna designs
- Ferrite sheet backing optimizes magnetic fields
- Wide operating temperature range -40ºC to +85ºC
- Matched to leading NFC controller IC's

APPLICATIONS:

- Mobiles
- NFC Payment readers
- Electronic wallets
- Health care ID scanners
- NFC data loggers transport
- Ticketing systems
- Museum information systems
- Electronic Parking Payments
- Industrial data collection

STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Note
Operating Frequency		13.56		MHz	
Inductance	2.07	2.3	2.53	µH	
Q-Factor	35			MHz	
DC Resistance			1.0	Ω	
Impedance with matching network		80		Ω	
Self Resonance Frequency		34		MHz	
Operating Temperature	-40		+85	°C	

(*) Test equipment: Agilent 5071C

Product Customization

Products can be customized according to customer requirements. Features such as the dimensions or shape of the coil or its inductance can be customized. Please contact ABRACON or authorized distributor / agent for further details.

Component	Value (for reference only[1])	Notes
L0	560nH	EMC filter resonance at 15.8MHz（NXP PN544）
C0	180pF	EMC filter resonance at 15.8MHz (NXP PN544)
C1	25pF	Antenna matching component, to achieve series resonance at 13.56MHz.
C_2 (Includes C_{2a} and C_{2b} values)	82pF	Antenna matching component, to achieve parallel resonance at 13.56MHz.
Rq	0Ω	Damping resistor, the Rq resistor used to lower Q-value if above 35 Ohm, if needed.

Note [1]: Values can change depending upon drive circuits, design of the antenna and environment.

PN544

ABRACON IS ISO9001:2008 CERTIFIED

ABRACON LLC
The Power of Linking Together

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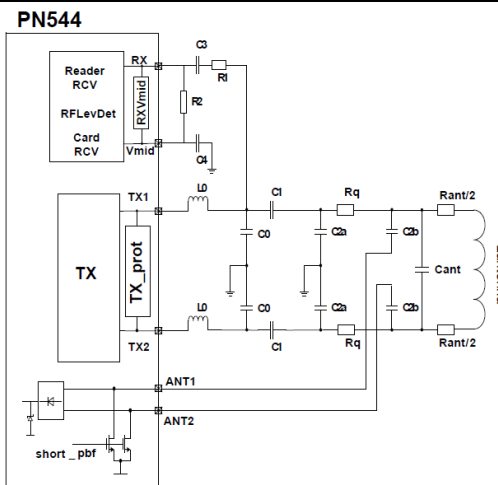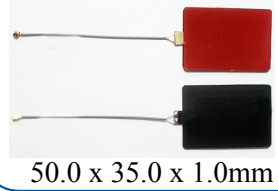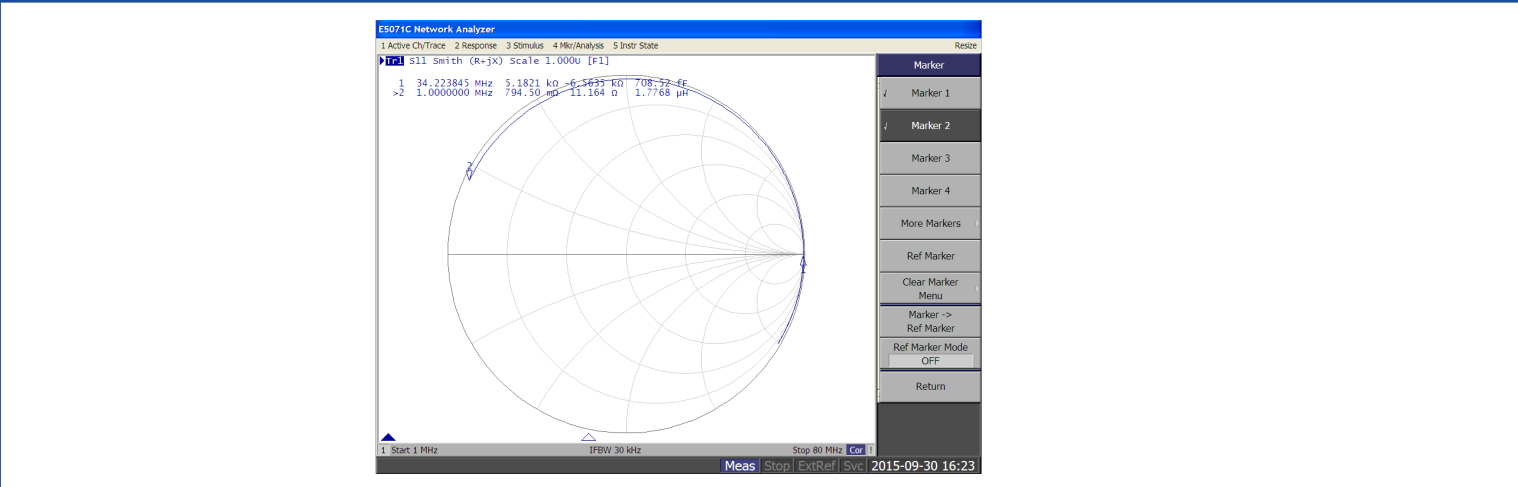# NFC 13.56MHz Antenna with IPEX Connector

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RoHS/RoHS II compliant

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▷ **ANTENNA RESPONSE–RETURN LOSS**

▷ **OUTLINE DIMENSION:**
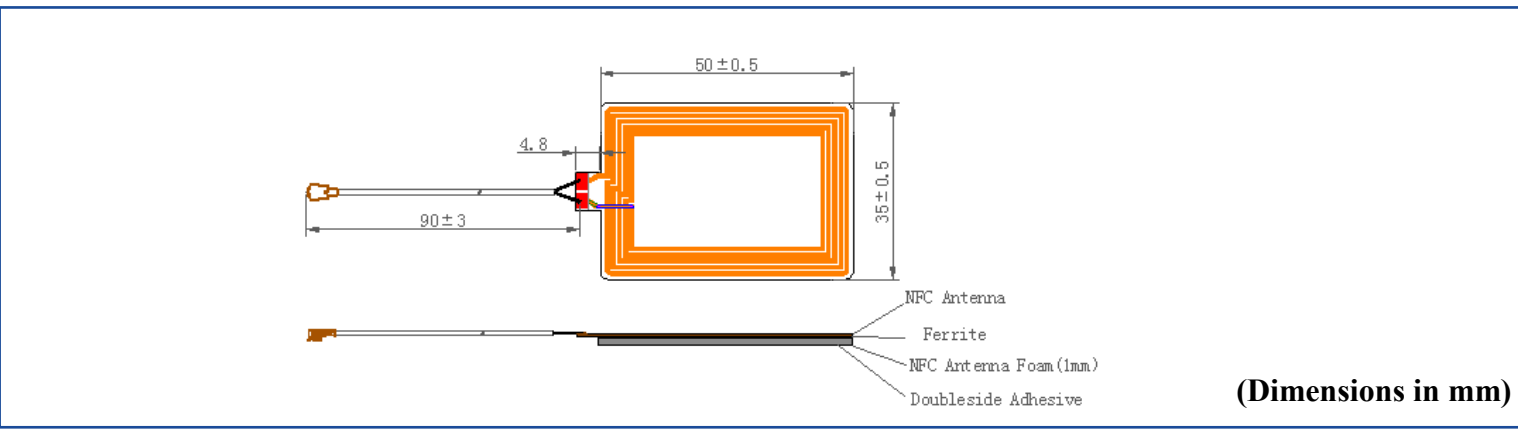
(Dimensions in mm)

▷ **CONSTRUCTION:**

Material Name	Thickness (µm)	Thickness (in)
NFC Antenna	100	0.004
Ferrite Sheet	150	0.006
NFC Antenna Foam	1000	0.04
Double side Adhesive	50	0.002
Total Thickness	1300	0.052

Packaging:

There are 10 units of ANFCA-5035-A01-IPEX per poly bag.