## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## NFC 13.56MHz Antenna with IPEX Connector

ANFCA-5035-A01-IPEX

#### **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 -40°C to +85°C
- Matched to leading NFC controller IC's

#### Pb RoHS/RoHS II compliant

# 50.0 x 35.0 x 1.0mm

#### > 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

> S	TANDARD	<b>SPECIFICATIONS:</b>	
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Parameters	Min.	Тур.	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

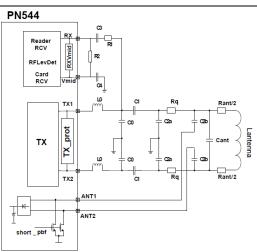
#### **Product Customization**

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.

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Component	Value (for reference only <sup>(1)</sup> )	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 <sup>(1)</sup>: Values can change depending upon drive circuits, design of the antenna and environment.





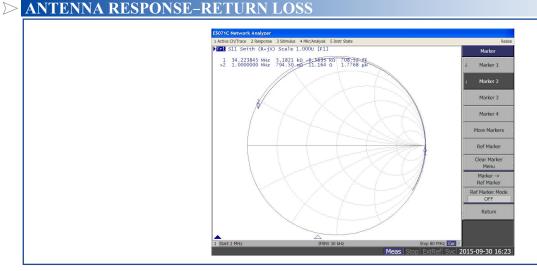
2 Faraday, Suite# B | Irvine | CA 92618 **Revised:12.10.15** Ph. 949.546.8000 | Fax. 949.546.8001 Visit www.abracon.com for Terms and Conditions of Sale

## NFC 13.56MHz Antenna with IPEX Connector

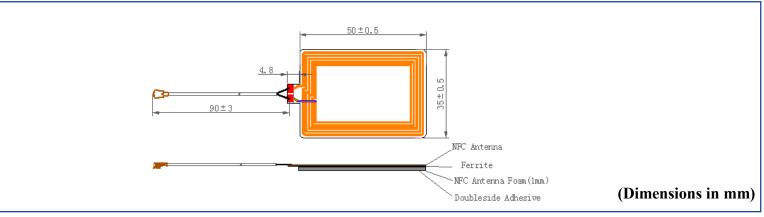
#### ANFCA-5035-A01-IPEX

#### **RoHS/RoHS II compliant**

50.0 x 35.0 x 1.0mm



#### **OUTLINE DIMENSION:**



#### **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.

**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.



