

**Model No. : RFNFC190400NNFB001****1. Explanation of part number :**

| RF        | NFC          | 1904                                                                           | 00                                                  | N                                                                                                                                         | N                                                                              | F                                                                                                                                                                                                                                           | B                                             | 0                                                                                                                                                                                                                                                   | 01                  |
|-----------|--------------|--------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Type Code | Product Code | FPC Dimension (Unit: mm)                                                       | Cable Length (unit: cm)                             | Connector Brand                                                                                                                           | Type of Connector                                                              | Application                                                                                                                                                                                                                                 | Project status                                | Wire Diameter                                                                                                                                                                                                                                       | Project             |
| RF Device | NFC Antenna  | Per 2 digits of length, width<br>e.g.: 2818<br>Length 28.32mm<br>Width 18.44mm | 2 digits for cable length<br>e.g.: 00<br>None Cable | A: N<br>C: MCX<br>D: IPEX III<br>E: IPEX IV<br>F: IPEX A13<br>H: Hirose<br>I: IPEX<br>M: MMCX<br>S: SMA<br>T: TNC<br>U: MURATA<br>N: None | A: Reverse Female<br><b>B: Reverse Male</b><br>F: Female<br>M: Male<br>N: None | <b>0: 0GHz</b><br><b>3: 3GHz</b><br><b>6: 6GHz</b><br>A: 2.4GHz ISM band<br>B: GSM 900/1800 dual band<br><b>F : NFC+Ferrite Sheet</b><br>G: GPS band<br>L: 2.4/5.2/5.8 GHz tri-band<br><b>N: NFC</b><br><b>T: LTE band</b><br>W: WCDMA band | B: MP<br><b>T: During Test</b><br>X: Pile Run | 0: None<br>1: $\varnothing$ 0.81<br>2: $\varnothing$ 1.32<br>3: $\varnothing$ 1.13<br>4: <b>Low Loss</b><br>$\varnothing$ 1.13<br>5: $\varnothing$ 0.5<br>6: RG316<br>7: $\varnothing$ 1.37<br>8: RG178<br>9: <b>Low Loss</b><br>$\varnothing$ 1.37 | 01~99 series number |

**2. Electrical Specification :**

| Item                     | Specification                       |
|--------------------------|-------------------------------------|
| Working Frequency Range  | 13.56 MHz                           |
| Cu thickness             | >70 $\mu$ m (Higher is better)      |
| La(1 MHz)                | 1.08 uH                             |
| Rs(1 MHz)                | 1.35 $\Omega$                       |
| Self resonance frequency | 60.5 MHz                            |
| Test frequency           | 1 MHz                               |
| Rp                       | 5.8 k Ohm                           |
| Operation Temperature    | -20 $^{\circ}$ C ~ +65 $^{\circ}$ C |

UNLESS OTHER SPECIFIED TOLERANCES ON :  
X=N/A      X.X=N/A      X.XX=N/A  
ANGLES=N/A      HOLEDIA=N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 李欣樺

CHECKED BY : 詹惠雯

DESIGNED BY : 林育帆

APPROVED BY : 陳振榮

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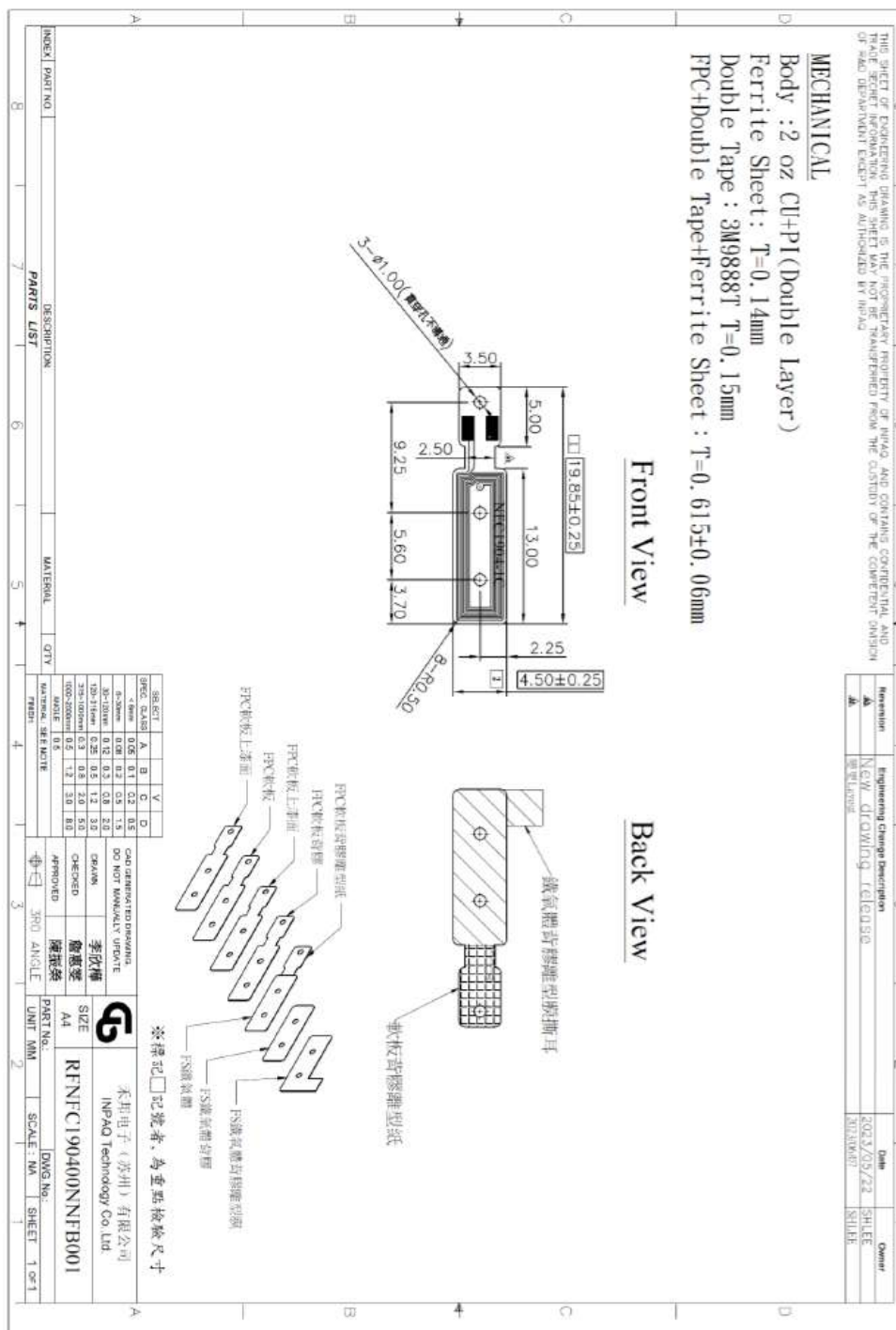
TITLE : RFNFC190400NNFB001

DOCUMENT NO.

ENS070030450-000880301247

SPEC REV.  
A0

### 3. Antenna Drawing :



UNLESS OTHER SPECIFIED TOLERANCES ON :

$$X = N/A$$
$$X, X = N/A$$

X,XX=N/A

ANGLES = N/A

HOLEDIA=N/A

SCALE : N/A

UNIT : mm

DRAWN BY: 李欣權

CHECKED BY: 詹惠雯

DESIGNED BY: 林育帆

APPROVED BY: 陳振榮

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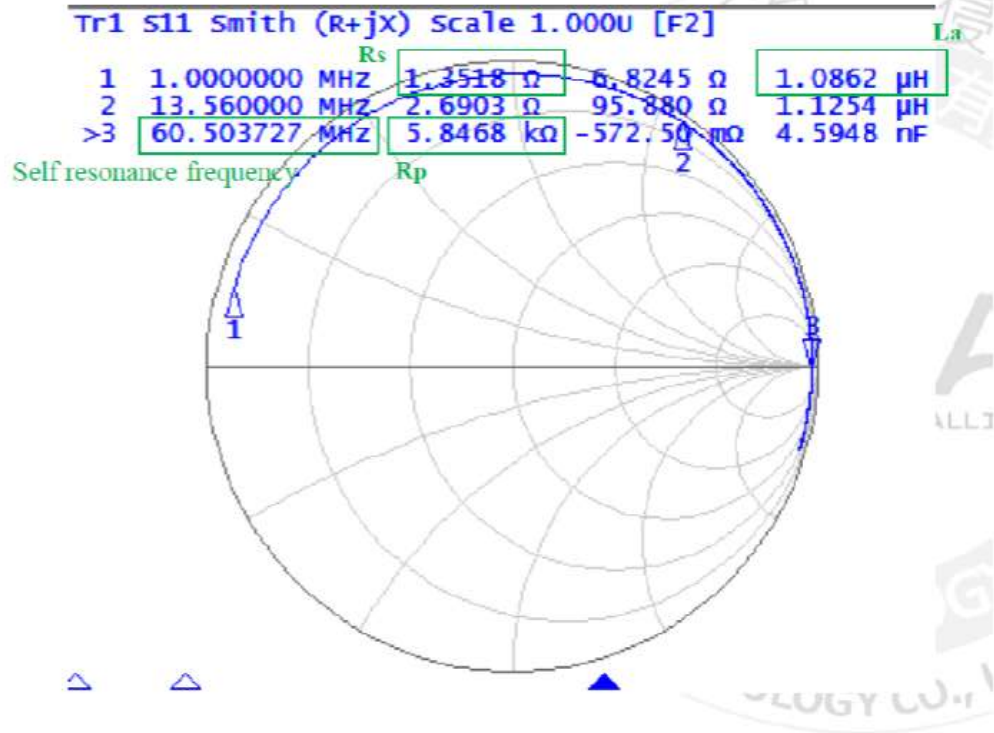
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| SPEC | REV. |
|      | A0   |

#### 4. Performance Report :

#### ■ NFC antenna series equivalent circuit



|                                                                                                                                                     |                   |                                                                                                                                                                                                       |                            |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
| UNLESS OTHER SPECIFIED TOLERANCES ON :<br>X=N/A                    X.X=N/A                    X.XX=N/A<br>ANGLES=N/A                    HOLEDIA=N/A |                   |                                                                                                                    | INPAQ TECHNOLOGY CO., LTD. |                 |
| SCALE : N/A                                                                                                                                         | UNIT : mm         |                                                                                                                                                                                                       |                            |                 |
| DRAWN BY : 李欣樺                                                                                                                                      | CHECKED BY : 詹惠愛  | THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION |                            |                 |
| DESIGNED BY : 林育帆                                                                                                                                   | APPROVED BY : 陳振榮 |                                                                                                                                                                                                       |                            |                 |
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