

## 2GHz~18GHz PLANE SPIRAL ANTENNA ARRAY

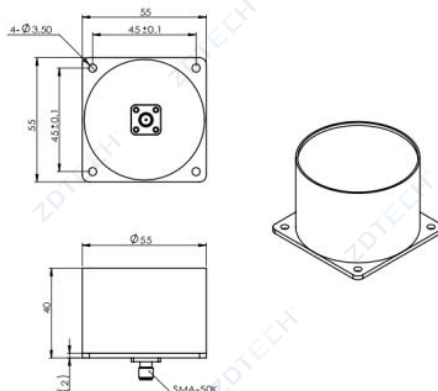
Model: ZD201804



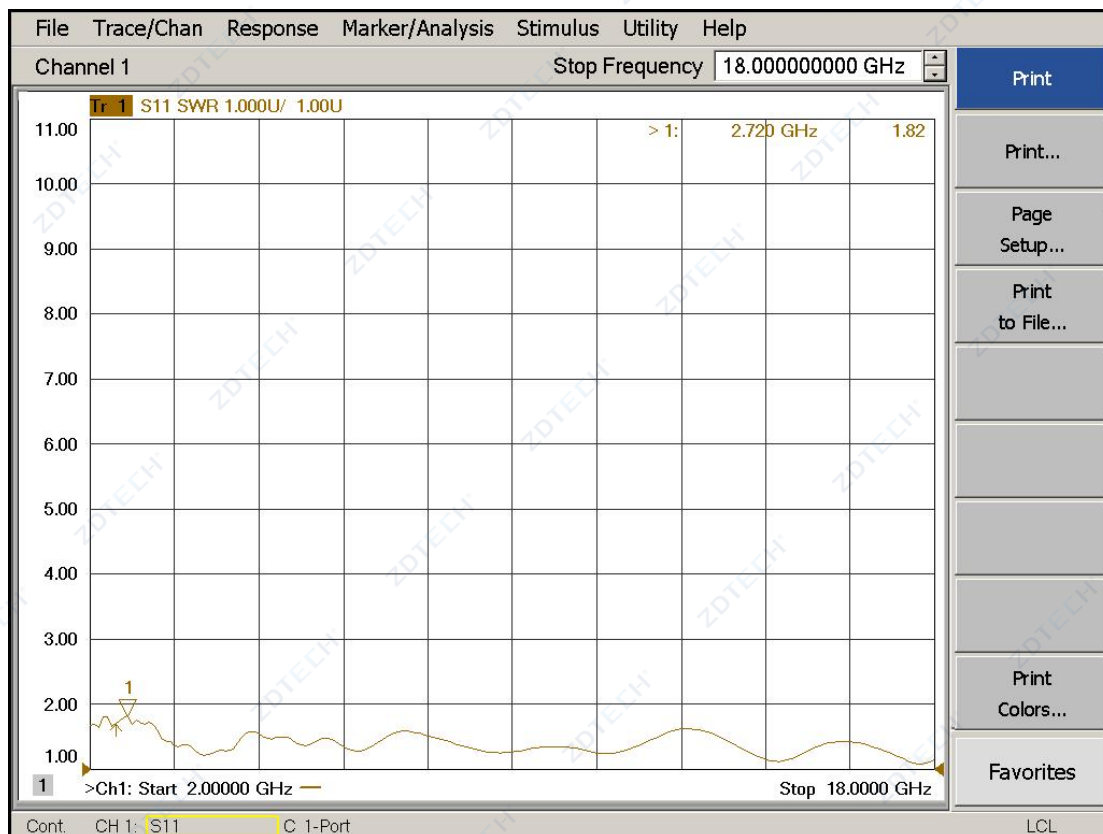
### 1. Technical Index

|                         |                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range         | 2-18GHz                                                                                                                                                                                                                                  |
| Standing Wave           | ≤2.5(typical value)                                                                                                                                                                                                                      |
| Polarization Method     | Right-handed circular polarization                                                                                                                                                                                                       |
| Gain<br>(Beam Center)   | ≥-7dBi@2GHz or higher;<br>≥-2dBi@3GHz or higher;<br>≥1 dBi at frequencies above 4 GHz;<br>≥4.5dBi@9GHz、10GHz;                                                                                                                            |
| Back Lobe               | ≤10dB                                                                                                                                                                                                                                    |
| Antenna Cavity Material | Alufer                                                                                                                                                                                                                                   |
| Beam Width              | ≥90°@2GHz and above (absolute gain ≥-10dBi with beam width);<br>≥90°@3GHz or higher (absolute gain ≥-5dBi beam width);<br>≥90°@4GHz and above (absolute gain ≥-4dBi beam width);<br>≥90°@9GHz, 10GHz (absolute gain ≥-1.5dBi beam width) |
| Joggle                  | SMA-50K (stainless steel)                                                                                                                                                                                                                |
| Weight                  | ≤50g                                                                                                                                                                                                                                     |
| Antenna Size            | ≤L55mm × W55mm × H40mm (excluding connectors)                                                                                                                                                                                            |
| Working Temperature     | -50℃~+70℃                                                                                                                                                                                                                                |
| Storage Temperature     | -50℃~+65℃                                                                                                                                                                                                                                |

### 2. Dimensions (Unit: mm)



### 3.Standing wave



### 4.Wave Speed Width

| service frequency (GHz) | 3dB beam width(°)phi=0 | 3dB beam width(°)phi=90 |
|-------------------------|------------------------|-------------------------|
| 2                       | 103.0                  | 101.7                   |
| 4                       | 83.5                   | 83.2                    |
| 6                       | 57.3                   | 81.4                    |
| 8                       | 58.4                   | 67.0                    |
| 10                      | 68.1                   | 78.8                    |
| 12                      | 85.0                   | 65.0                    |
| 14                      | 62.5                   | 87.5                    |
| 16                      | 102.5                  | 62.5                    |
| 18                      | 97.5                   | 52.5                    |

## 5. Typical Direction Map

