

2.4/5.85G Antenna

MODEL: TH-90C-SMA(M)-B



1. GENERAL DESCRIPTION

| Model No |
|---------------|
| TH90C-SMA-M-B |

Below is a table summarizing the antenna design specification.

1.1 Electrical Properties

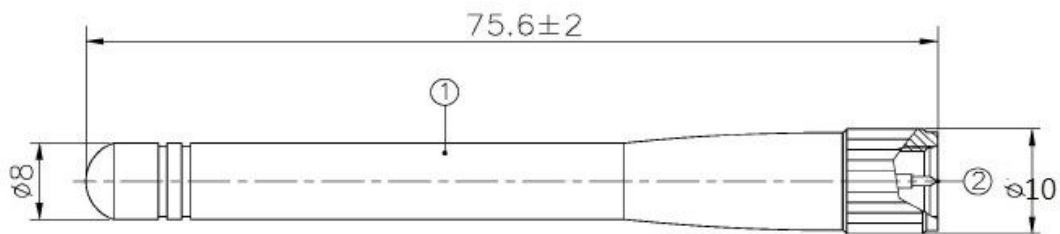
| Parameter | Description |
|-------------------|-----------------------|
| Frequency Band | 2.4~2.5 & 5.1~5.9 GHz |
| Nominal Impedance | 50 ohm |
| Polarization | Vertical |
| Return Loss | Please See Data-1 |
| V.S.W.R | 2.5:1 max |
| Gain | 2db typ |

1.2 Mechanical Properties

| Parameter | Description |
|-----------------------------|------------------|
| Antenna Type | External Antenna |
| Antenna Cover | TPE |
| Touch Type | Screw Type |
| Connector Type | SMA 180°(Male) |
| Antenna Dimensions | 75.6mm±2 |
| Antenna Color | Black |
| Operating Temperature Range | -20°C~+60°C |
| Storage Temperature Range | -30°C~+70°C |

2. Appearance

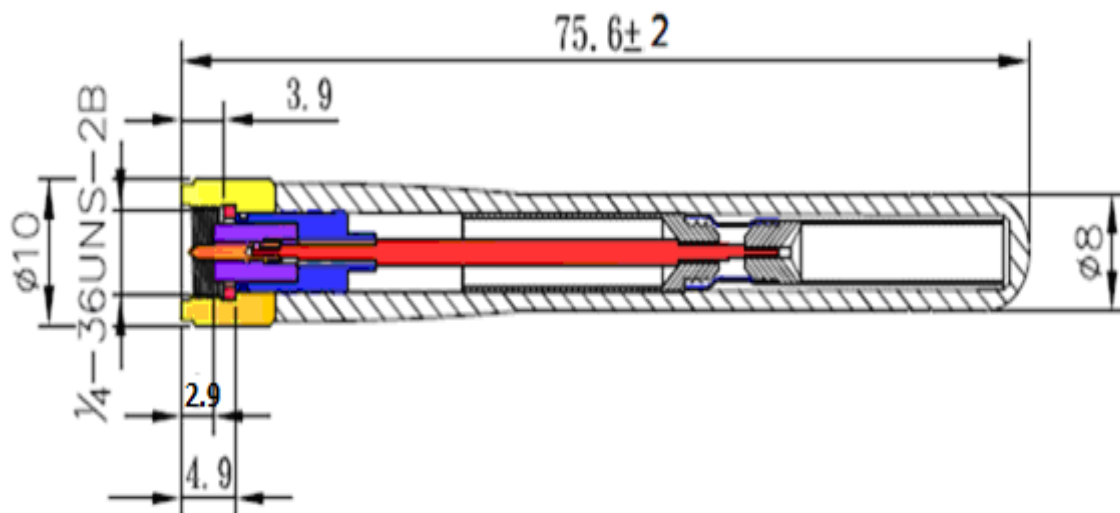
| NO. | NAME | FINISH | Q, TY |
|-----|---------------------|---------------|-------|
| 01 | Core tube | Black | 01 |
| 02 | SMA-Connector(Male) | Chrom plating | 01 |



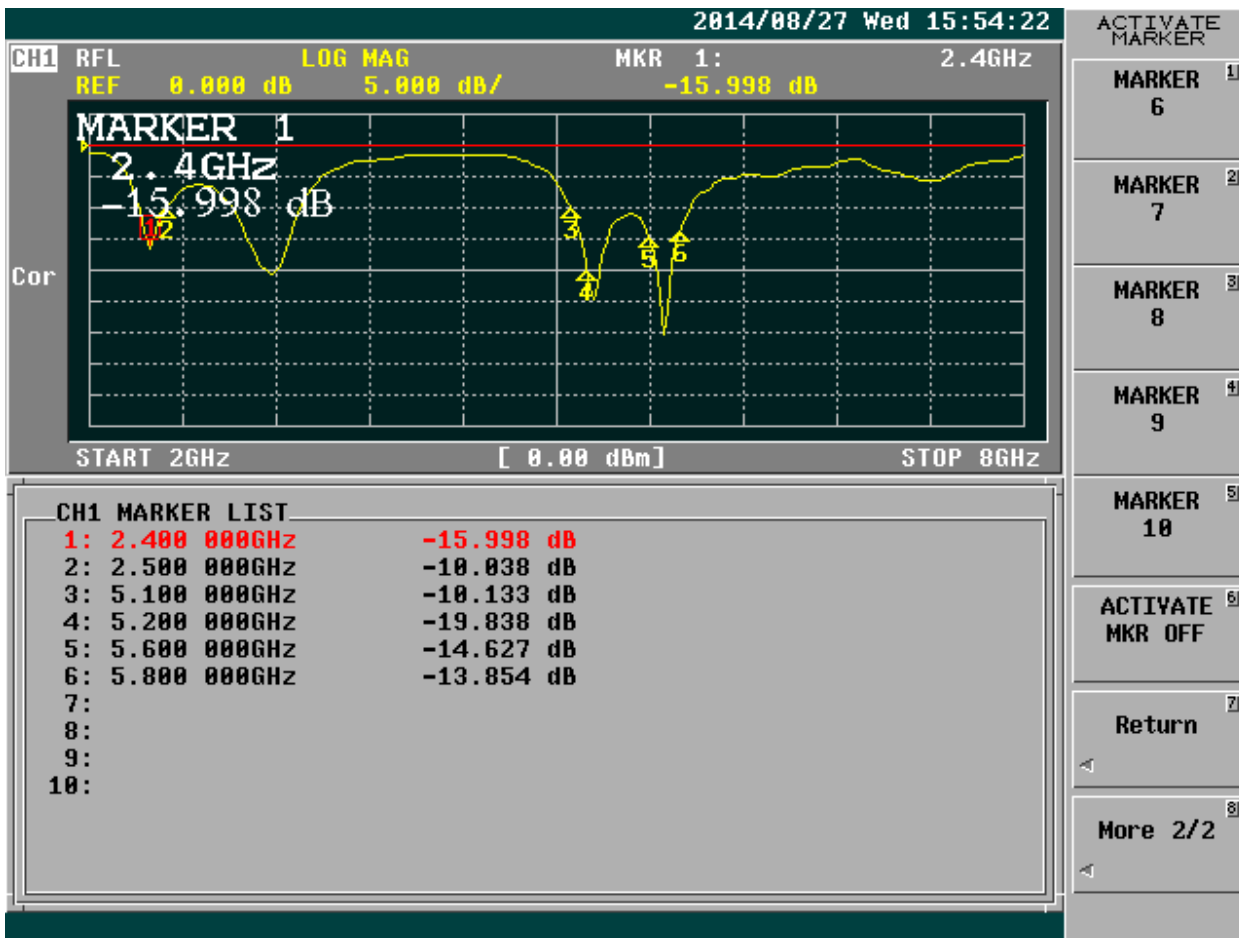
Third angle projection

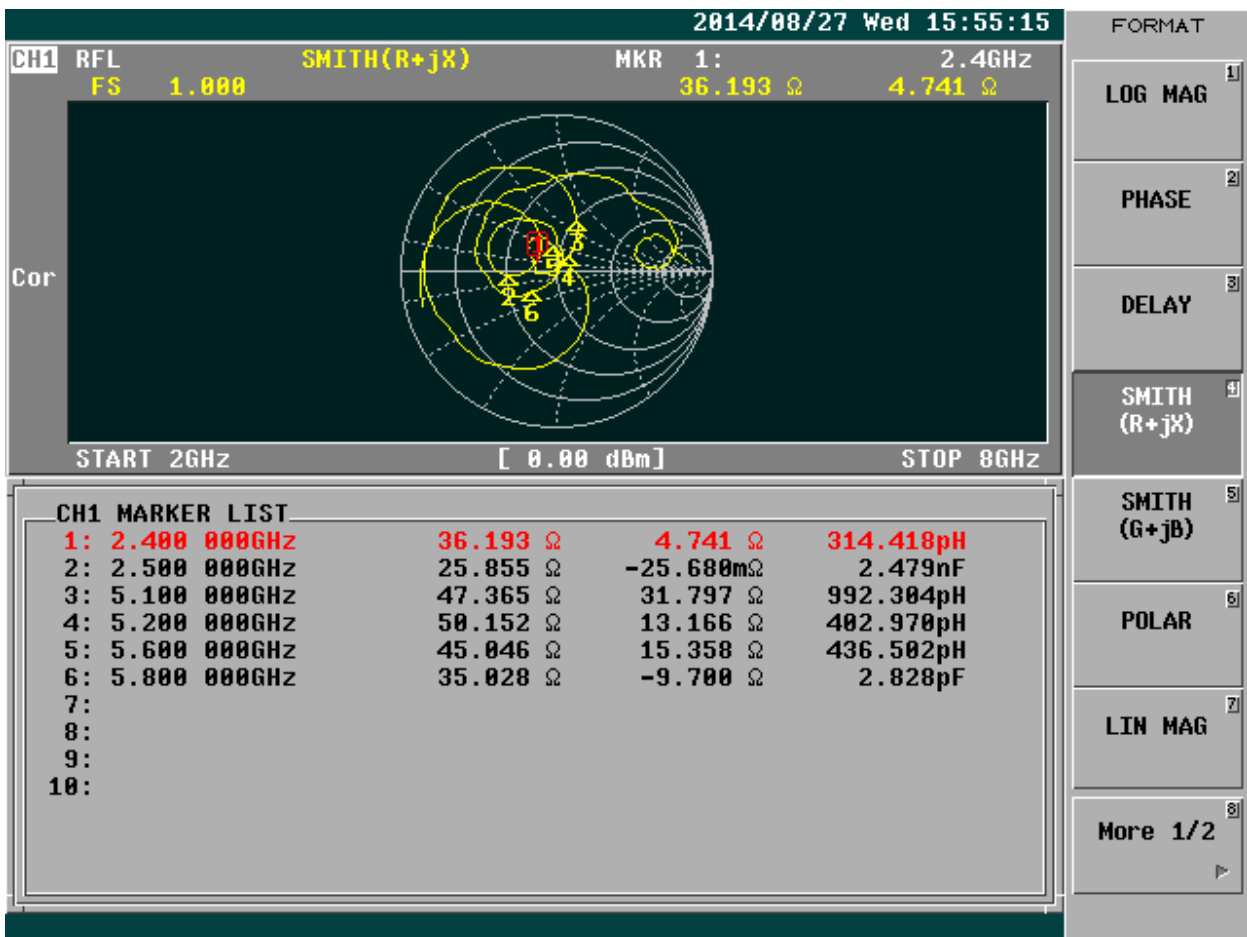
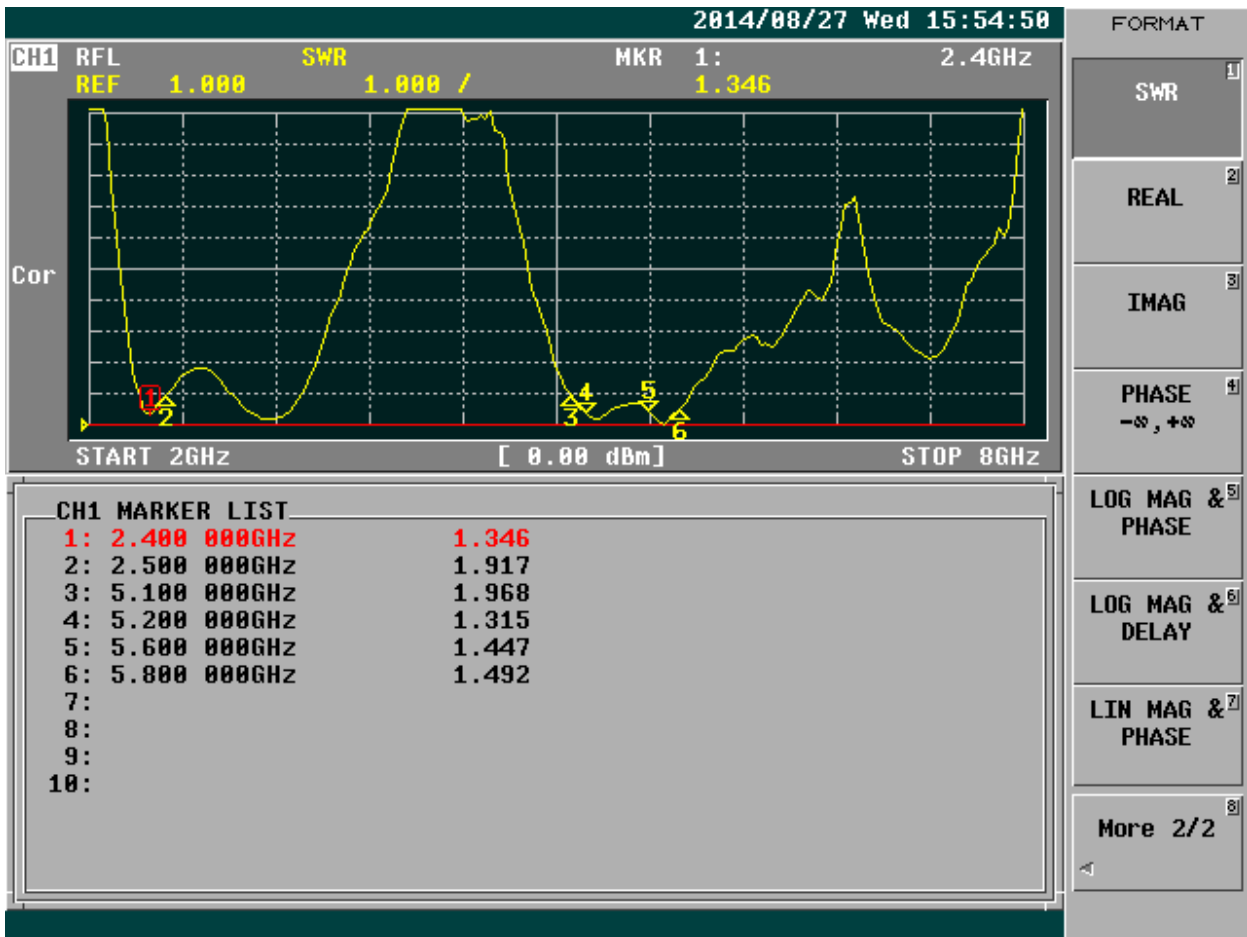


| CUSTOMER'S | MODEL | PARTS NUMBER | FREQUENCY | UNIT | SCALE | DATE | VERSION |
|-------------------|----------------------|--------------|---------------------|----------|---------|----------|----------|
| | | | 2.4-2.5/4.9-5.35GHz | M/M | | 20131211 | 1 |
| TOLERANCE | X. XX±0.15 | NAME | PARTS NUMBER | APPROVED | CHECKED | DRAWING | DESIGNED |
| SURFACE ROUGHNESS | $\frac{S}{\sqrt{V}}$ | APPEARANCE | | | | | |



3.Return Loss, V.S.W.R. and Smith Chart







1. Test result:

| Frequency (MHz) | 2400 | 2450 | 2500 | 5150 | 5250 | 5350 | 5600 | 5785 | 5850 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Average Gain (dBi) | -1.46 | -1.33 | -1.31 | -2.67 | -2.64 | -2.25 | -1.49 | -1.98 | -2.19 |
| Peak Gain (dBi) | 3.51 | 3.92 | 3.71 | 2.04 | 2.92 | 3.23 | 4.25 | 3.60 | 3.50 |
| Efficiency (%) | 71.42 | 73.54 | 73.94 | 54.07 | 54.47 | 59.56 | 71.00 | 63.38 | 60.35 |

Static load test : 20kg/5s / pass

