

# 2.4G ANTENNA

## MODEL: TC-822F



### 1. GENERAL DESCRIPTION

| Model No | P/N                       |
|----------|---------------------------|
| TC822F   | TC822F-RG174-2M-RP-SMA(M) |

Below is a table summarizing the antenna design specification.

#### 1.2 Electrica Properties

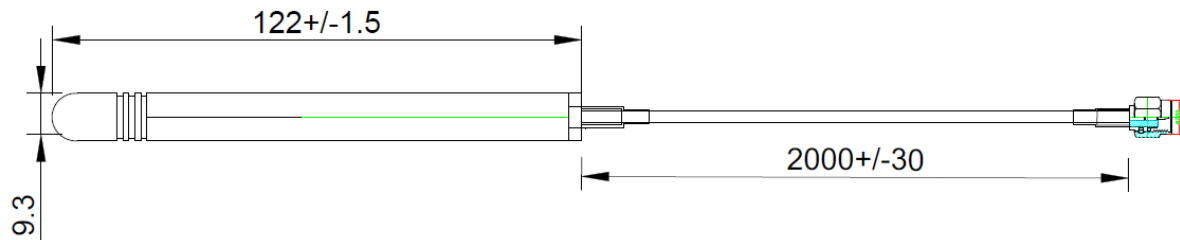
| Parameter                          | Description |
|------------------------------------|-------------|
| Frequency Band                     | 2.4~2.5Ghz  |
| Nominal Impedance                  | 50 ohm      |
| Polarization                       | Vertical    |
| Electrical                         | Dipole      |
| V.S.W.R                            | 2.5:1       |
| Antenna Gain                       | 0-3.0dBi    |
| Note: Gain includes the cable loss |             |

#### 1.2 Mechanical Properties

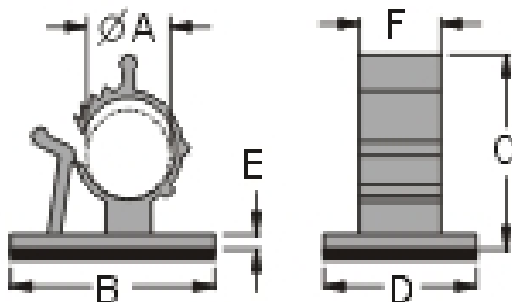
| Parameter        | Description               |
|------------------|---------------------------|
| Antenna Type     | Outdoor / indoors Antenna |
| Antenna Material | ASA-UV                    |
| Connector Type   | RP-SMA(M)                 |

|                             |                 |
|-----------------------------|-----------------|
| Antenna Dimensions          | 9.3x122mm ± 1.5 |
| Antenna Cable Total Length  | 2000mm ± 30     |
| Antenna Color               | Black           |
| Operating Temperature Range | -30°C~+70°C     |
| Storage Temperature Range   | -30°C~+70°C     |

## 2. Appearance

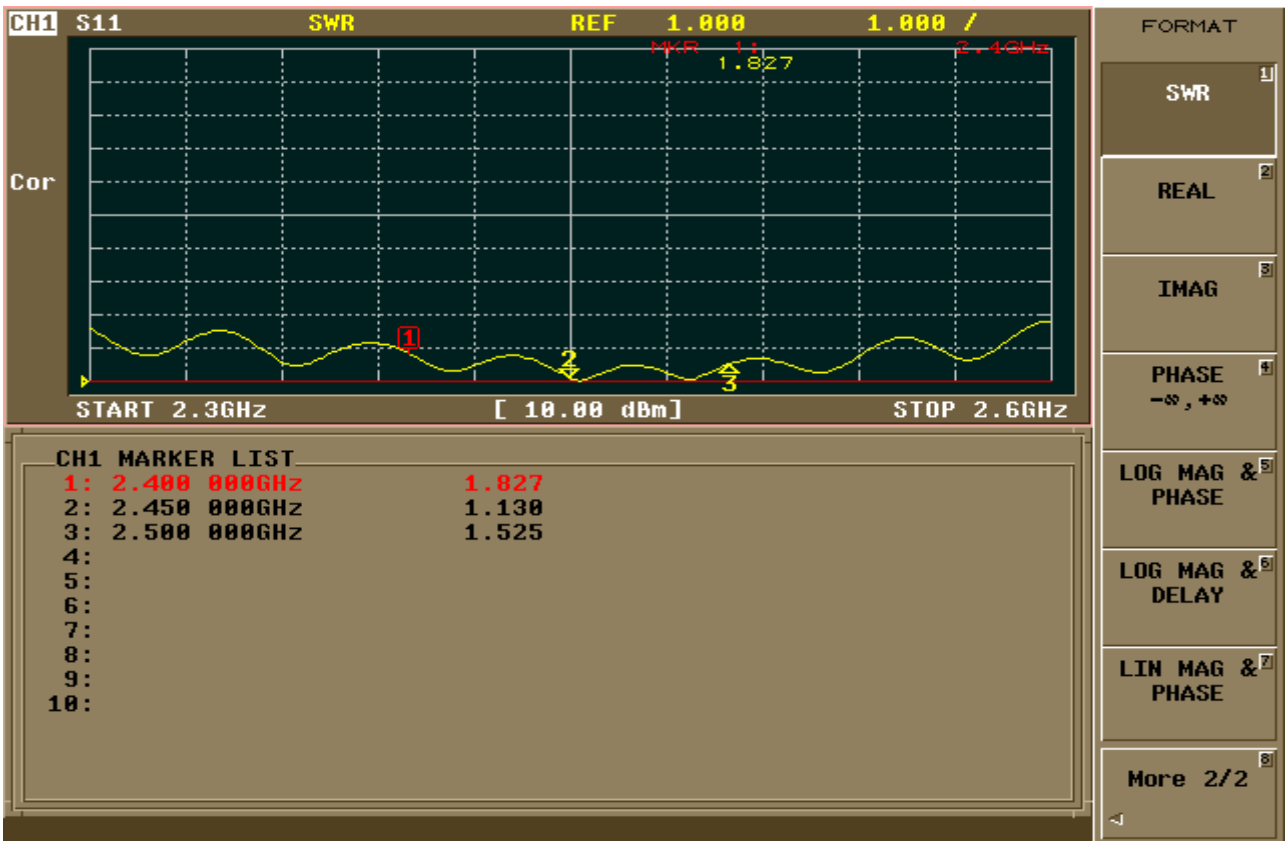
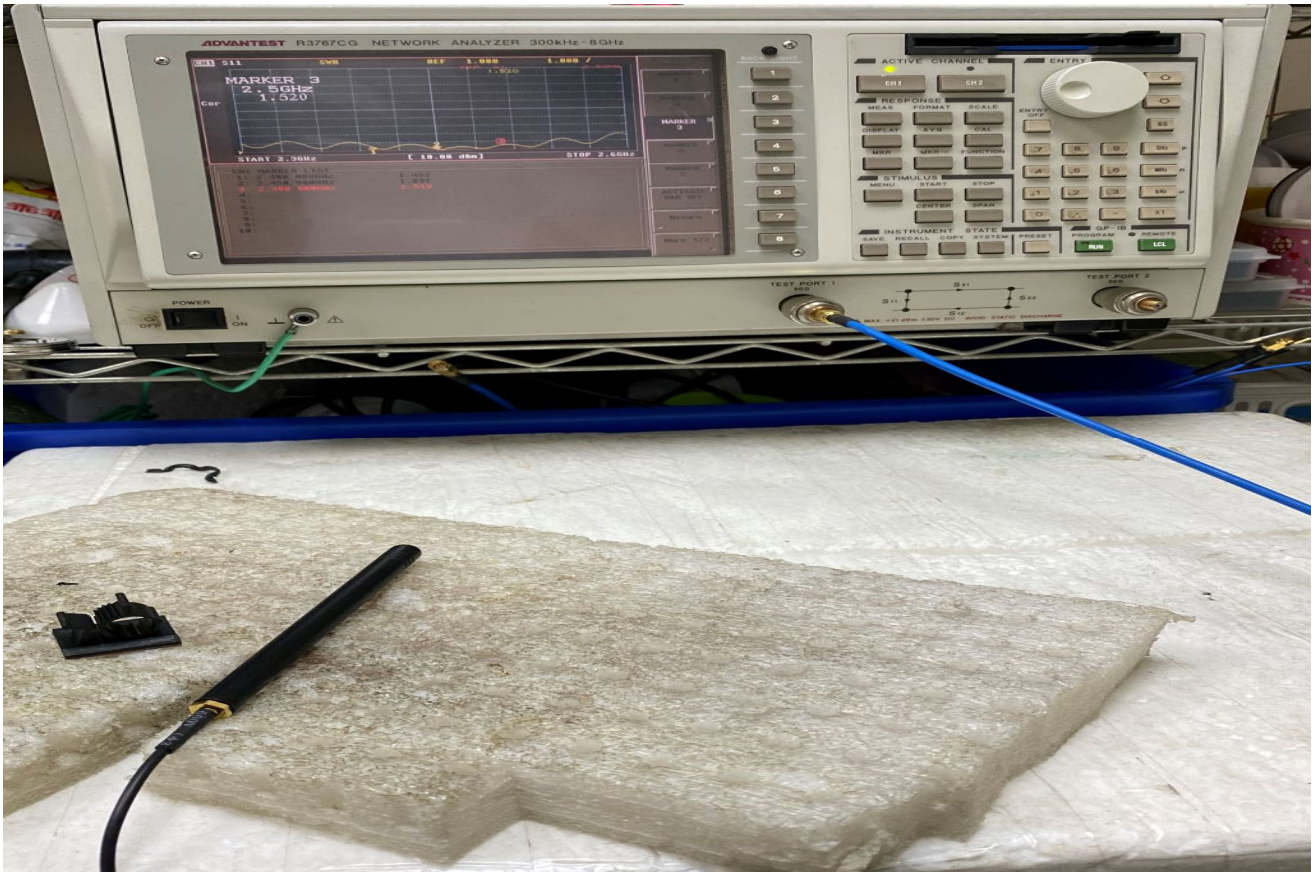


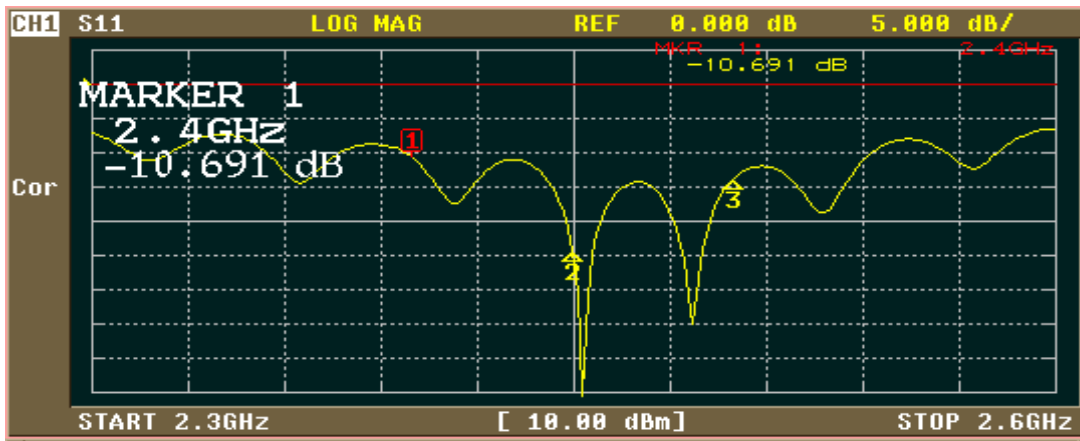
|      |                 |        |             |                            |  |                            |                |
|------|-----------------|--------|-------------|----------------------------|--|----------------------------|----------------|
|      |                 |        |             | 百展科技有限公司                   |  | TEL: 886-2-86720160        |                |
|      |                 |        |             | BJTEK NAVIGATION INC       |  | FAX: 886-2-86720161        |                |
|      |                 |        |             | TITLE: 2.4G DIPOLE ANTENNA |  | DWG NO.: TC-822F-RP-SMA(M) |                |
| 2    | ANT. COVER      | ASA-UV | BALCK       | TOLERANCE: AS SPEC.        |  | DATE: 2021.07.01           | UNIT: MM       |
| 1    | RP-SMA(M) CONN. | BRASS  | GOLD-PLATED | MATERIAL: SEE TABLE        |  | ISSUED: 787KEN             | DRAWN: BILL    |
| ITEM | DESCRIPTION     | MAT'L  | FINISH      | ITEM No.                   |  |                            | CHECKED: LOTUS |



Mounting : A: 7.9~10.3 mm / B:25.4mm / C:22.2mm / D:19.1mm / E:1.6mm / F:10.2mm  
( Double-sided tape )

### 3.FREQUENCY





ACTIVATE MARKER

MARKER 1

MARKER 2

MARKER 3

MARKER 4

MARKER 5

ACTIVATE MKR OFF

Return

More 1/2

CH1 MARKER LIST

|     |              |            |
|-----|--------------|------------|
| 1:  | 2.400 000GHz | -10.691 dB |
| 2:  | 2.450 000GHz | -24.411 dB |
| 3:  | 2.500 000GHz | -13.726 dB |
| 4:  |              |            |
| 5:  |              |            |
| 6:  |              |            |
| 7:  |              |            |
| 8:  |              |            |
| 9:  |              |            |
| 10: |              |            |



FORMAT

LOG MAG

PHASE

DELAY

SMITH (R+jX)

SMITH (G+jB)

POLAR

LIN MAG

More 1/2

CH1 MARKER LIST

|     |              |          |           |           |
|-----|--------------|----------|-----------|-----------|
| 1:  | 2.400 000GHz | 27.677 Ω | -4.060 Ω  | 16.332pF  |
| 2:  | 2.450 000GHz | 44.472 Ω | 1.616 Ω   | 104.982pH |
| 3:  | 2.500 000GHz | 50.683 Ω | -21.377 Ω | 2.978pF   |
| 4:  |              |          |           |           |
| 5:  |              |          |           |           |
| 6:  |              |          |           |           |
| 7:  |              |          |           |           |
| 8:  |              |          |           |           |
| 9:  |              |          |           |           |
| 10: |              |          |           |           |