

## SPECIFICATION

|              |   |                                                                                                               |
|--------------|---|---------------------------------------------------------------------------------------------------------------|
| Part No.     | : | <b>TI.10.0112</b>                                                                                             |
| Product Name | : | 433MHz ISM Band Terminal Antenna<br>Omni-directional, with a peak gain of 0dBi                                |
| Features     | : | SMA(M)RA Plug Connector<br>Low Profile and Robust Handling<br>44.8mm Antenna Length<br>IP65<br>RoHS Compliant |
| Picture      | : |                                                                                                               |



## 1. Introduction

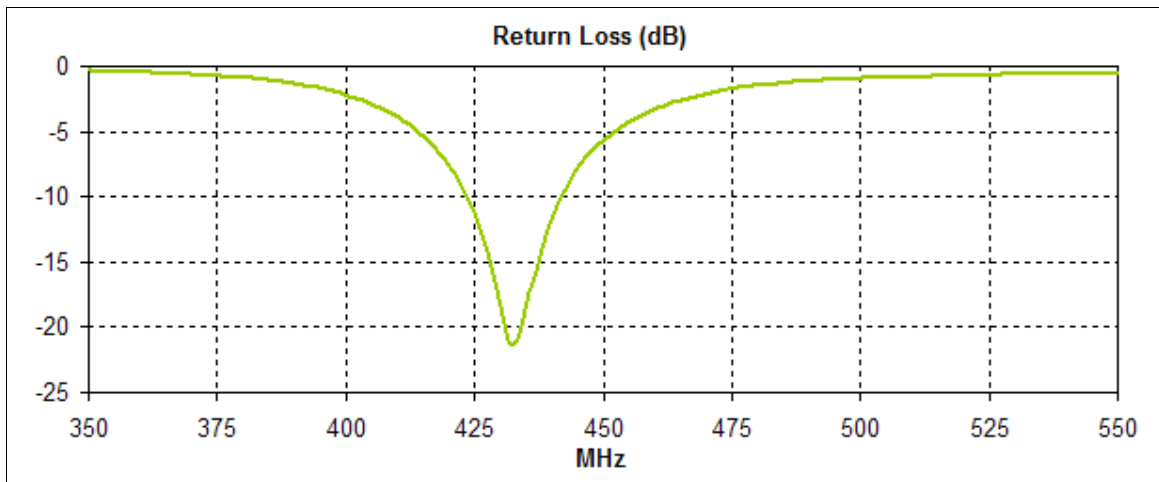
The TI.10 series are high performance 433MHz omni-directional antennas. The TI.10 terminal SMA R/A plug mount antenna is ideal for mobile small form factor applications. At only 44.8mm in length Omni-directional with a peak gain 0dBi ensures constant reception and transmission. The antenna structure is designed for robust handling and the housing is made with TPE giving reliable performance in tough environments.

## 2. Key Antenna Performance Indicators

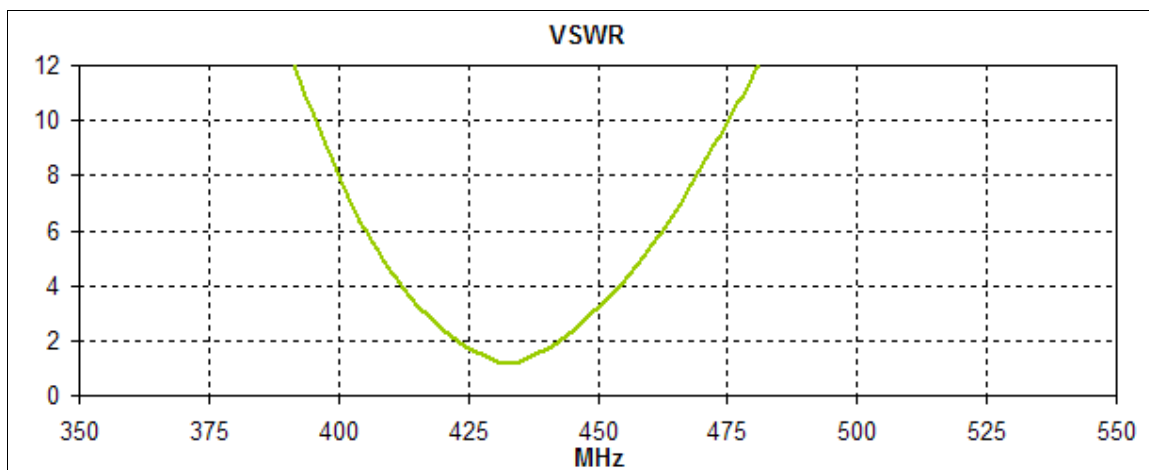
| Parameter             | Specification    |
|-----------------------|------------------|
| Applications          | 433MHz ISM Band  |
| Frequency             | 433.05~434.79MHz |
| Peak Gain             | 0dBi             |
| Return Loss           | -20dB            |
| Impedance             | 50 Ohms          |
| Radiation Pattern     | Omni-directional |
| Polarization          | Linear           |
| VSWR                  | $\leq 1.5:1$     |
| Power handling        | 5 W              |
| Housing               | TPE              |
| Connector             | SMA(M)RA Plug    |
| Operation Temperature | -40°C to + 85°C  |
| Storage Temperature   | -40°C to + 105°C |
| Relative Humidity     | 40% to 95%       |
| Dimensions            | Length: 44.8mm   |
| Weight                | 8.5g             |

## 3. Antenna Parameters

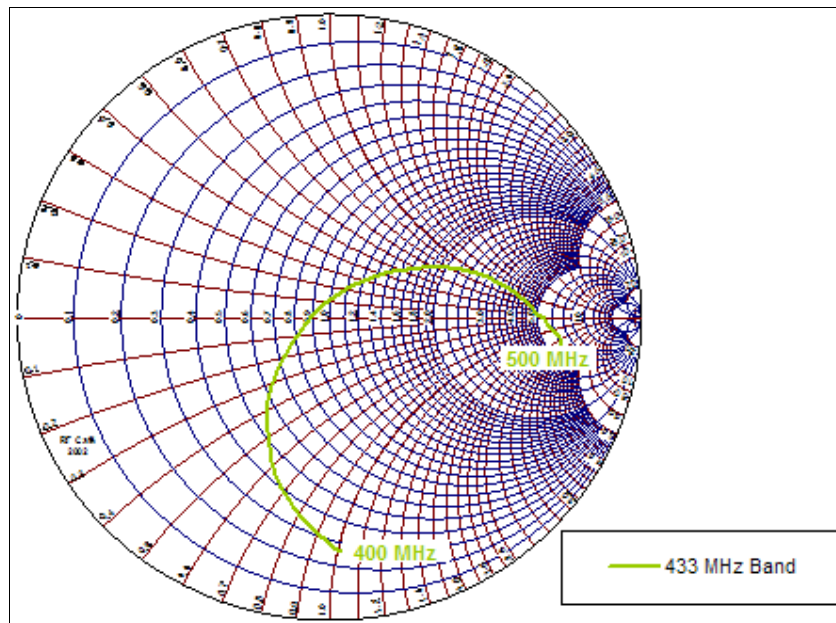
### 3.1 Return Loss Data



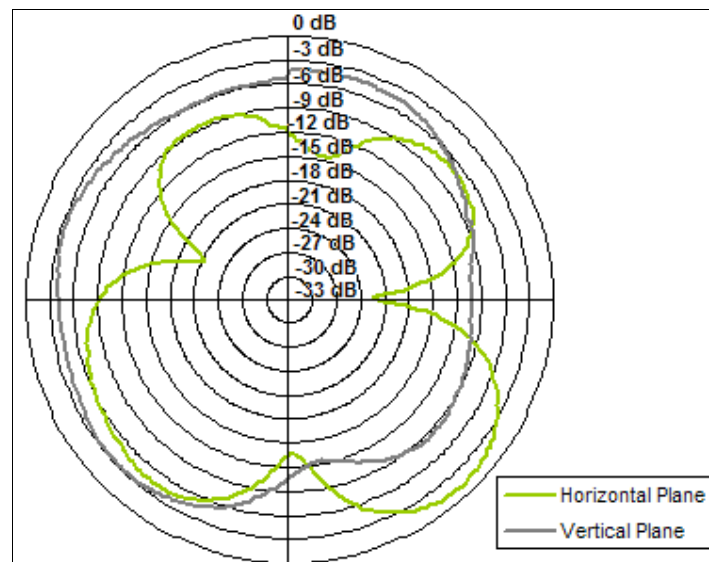
### 3.2 VSWR Data



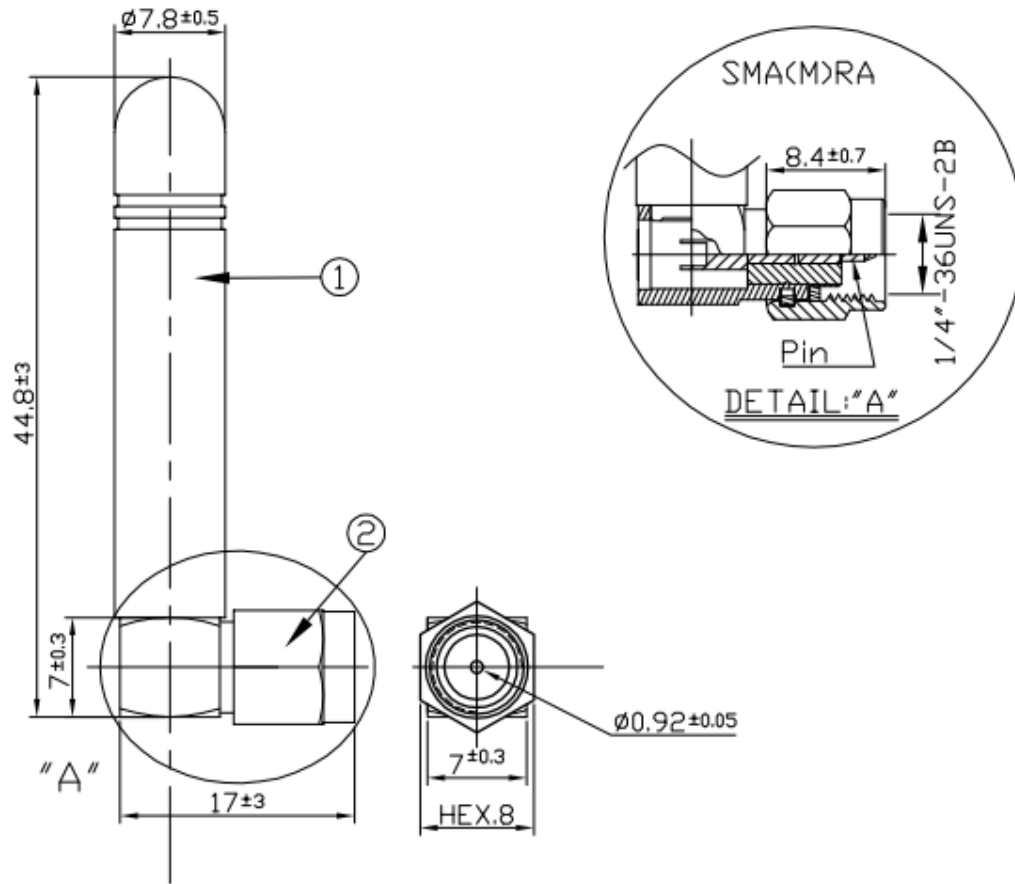
### 3.3 Smith Chart Data



### 3.4 Radiation Pattern



## 4. Mechanical Drawing



|   | Name          | Material | Finish | Quantity |
|---|---------------|----------|--------|----------|
| ① | Antenna Cover | TPU      | Black  | 1        |
| ② | SMA(M)RA      | Brass    | Gold   | 1        |

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