



TAOGLAS®



Datasheet

915/868MHz Terminal Antenna

Part No:
TI.08.C.0112

Description

915/868MHz ISM Band Terminal Antenna Fixed Right-Angle SMA(M) Connector

Features:

Omni-Directional Dipole Antenna
TPU Housing
Dimensions: 53x17mm
SMA Male Right Angle Connector
RoHS & Reach Compliant

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1. Introduction



The Taoglas TI.08.C.0112 is a high performance antenna covering both 915 and 868MHz, small form factor, dipole omni-direction terminal mount antenna. This antenna features an SMA(M) right angle connector as standard.

Some typical applications include:

- Smart Lighting
- Remote Monitoring
- IoT (Internet of Things)
- Smart Metering

This antenna is fabricated using TPU, which is a lightweight robust material used on several other Taoglas products. The TI.08.0112 can function impressively with a small ground plane while maintaining high efficiencies, on the band 863~870 it can reach at least 53% on a 15x9cm ground plane. The antenna connector type can be customizable, please contact your regional Taoglas sales facility for support.

2. Specification

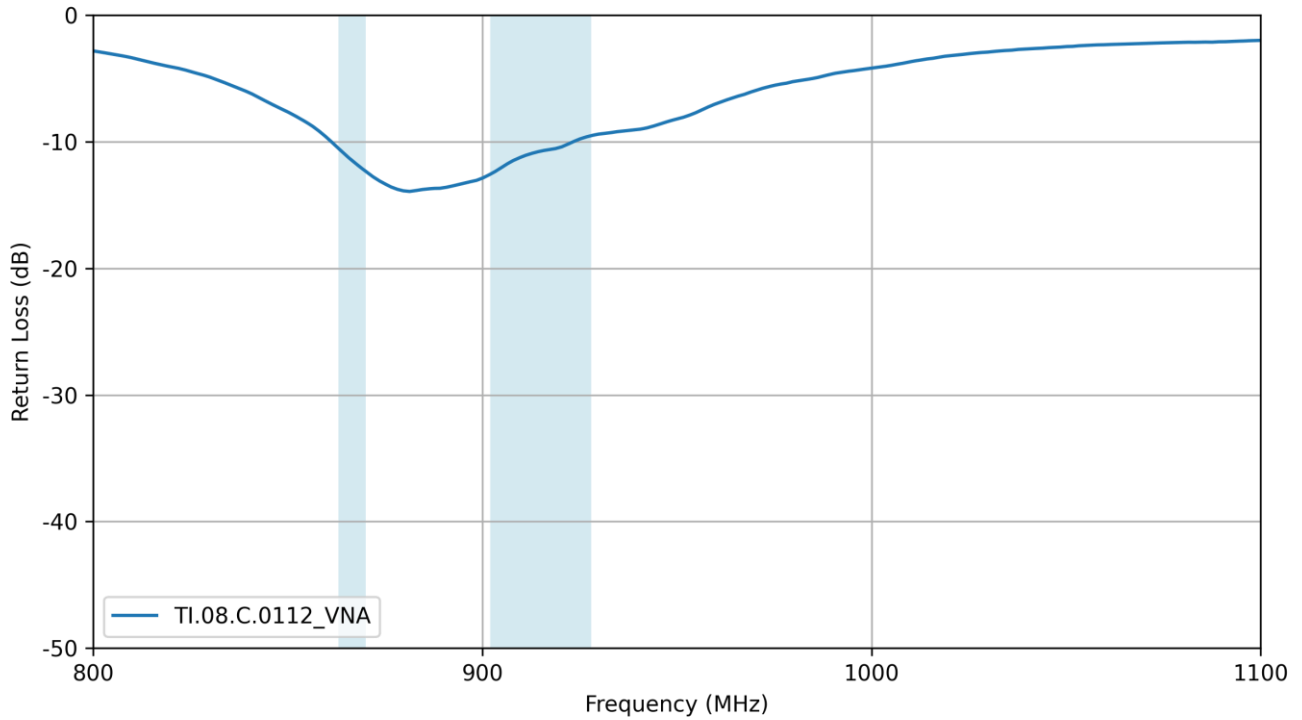
Electrical								
Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	Polarization	Radiation Pattern	Input power
868MHz	863-870	69.1	-1.60	2.47	50 Ω	Linear	Omni	50 W
915MHz	902-928	71.9	-1.43	2.91				

Mechanical	
Height	53 \pm 2 mm
Diameter	\varnothing 7 \pm 0.2 mm
Width	17 \pm 0.8 mm
Casing	TPU
Connector	SMA(M) RA

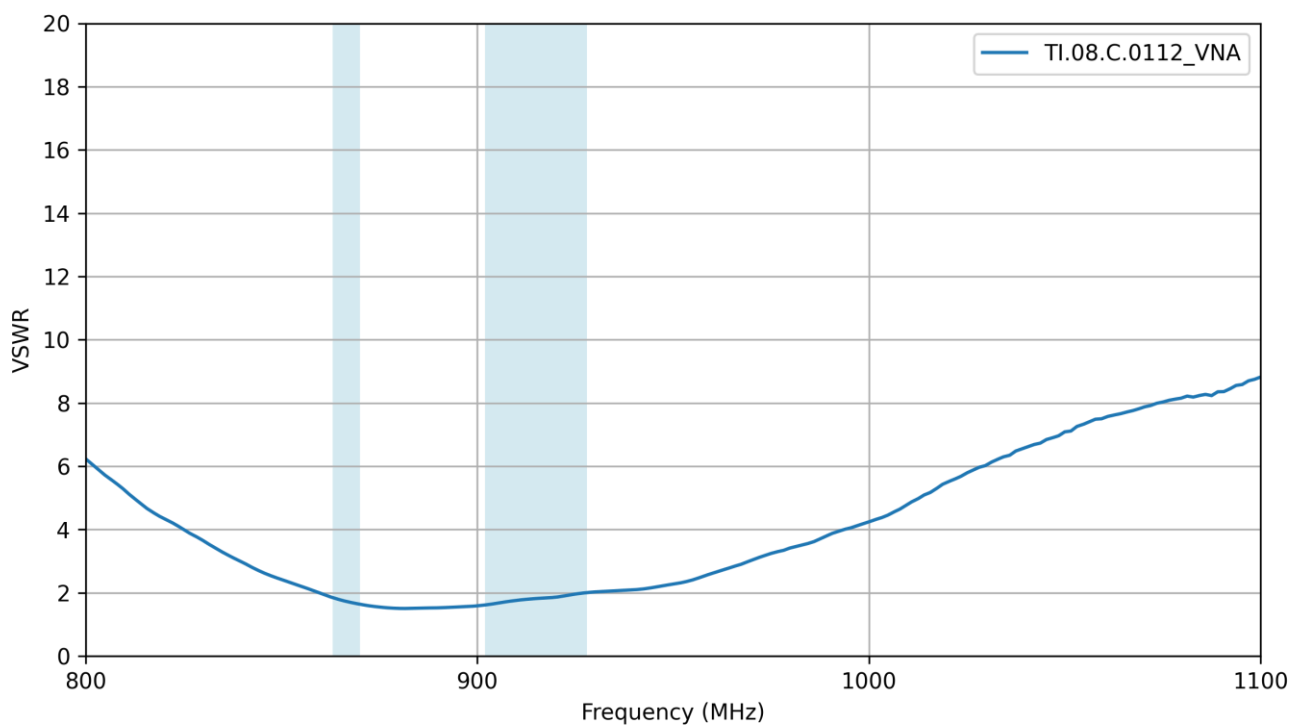
Environmental	
Temperature Range	-40°C to 70°C

3. Antenna Characteristics

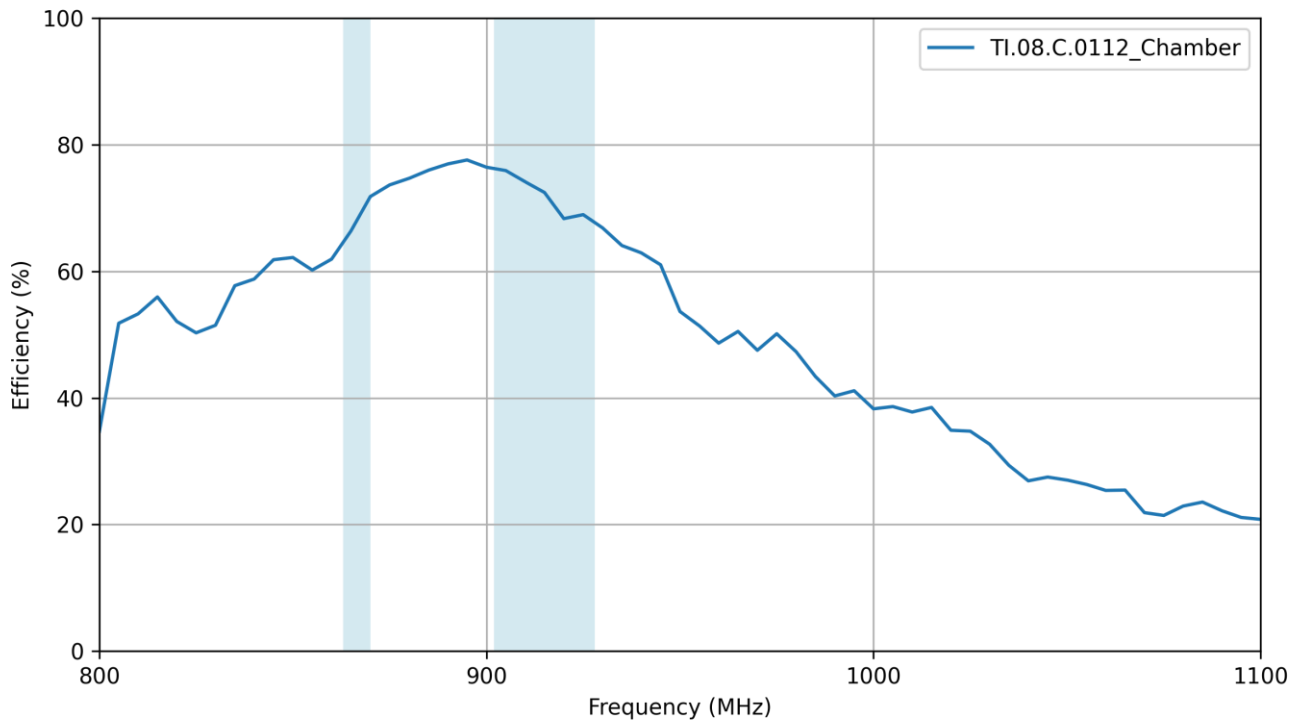
3.1 Return Loss



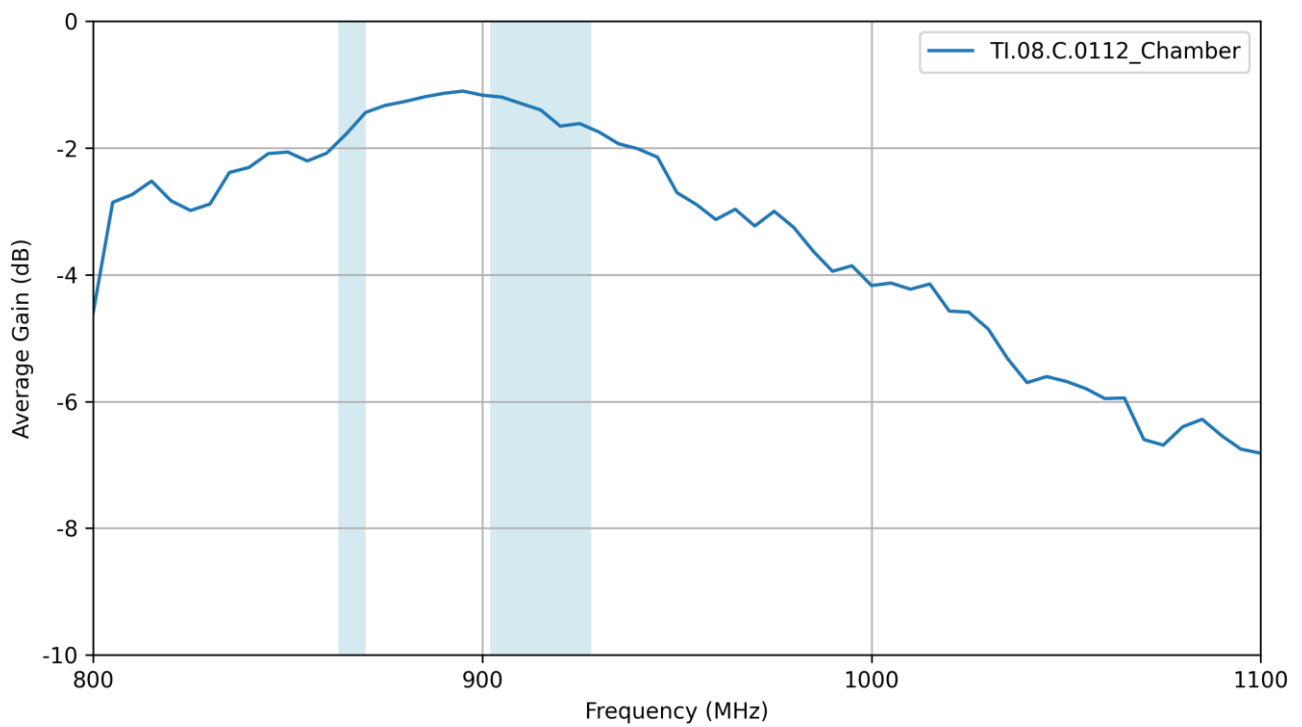
3.2 VSWR



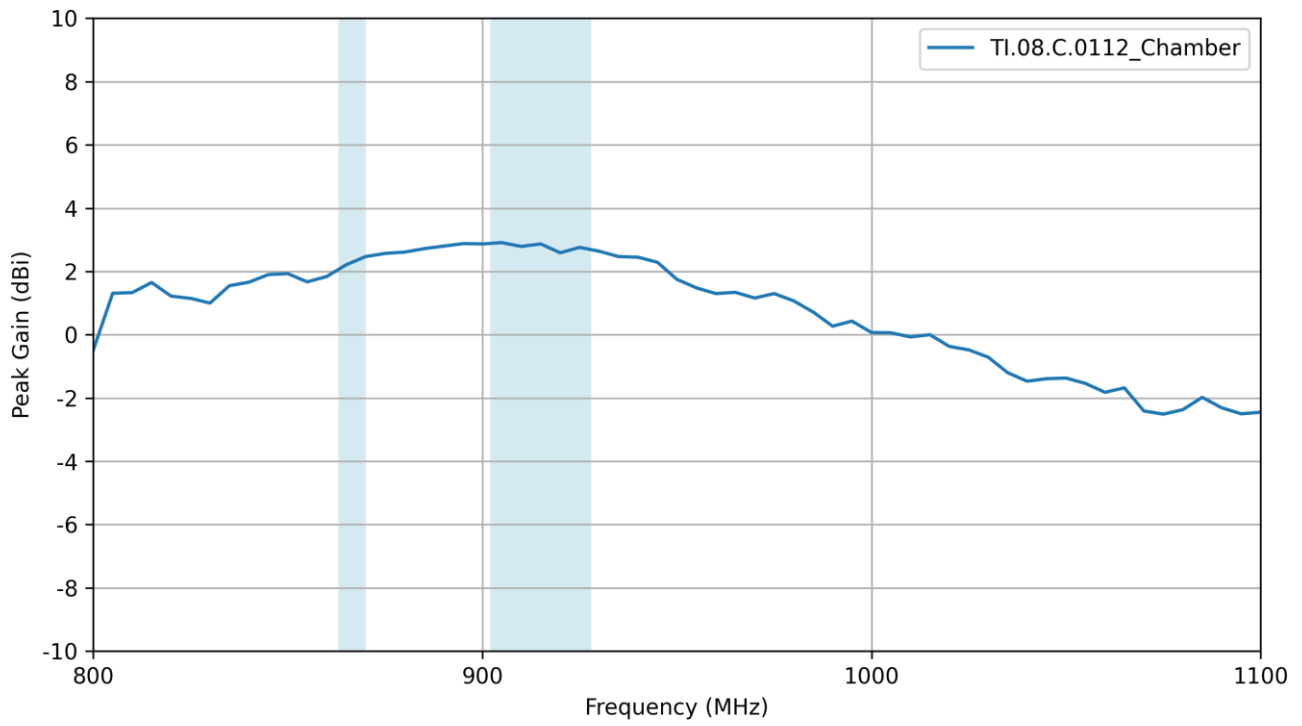
3.3 Efficiency



3.4 Average Gain

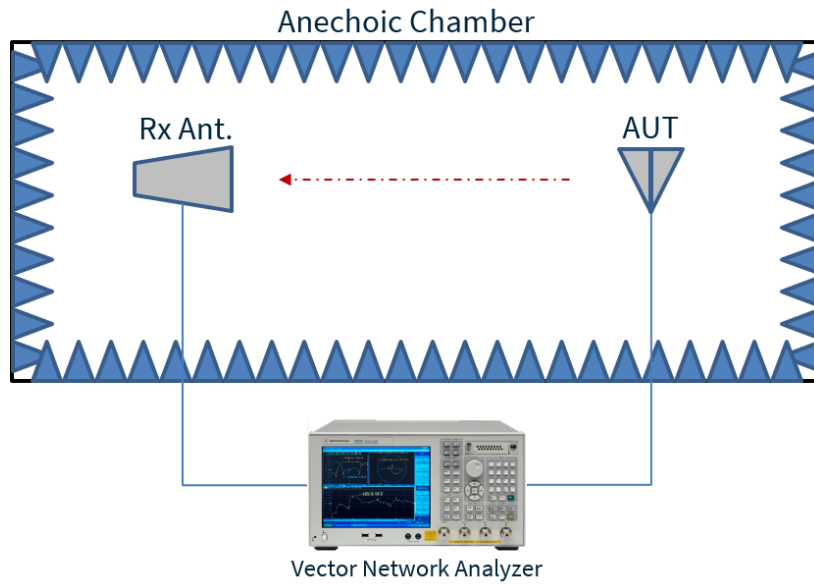


3.5 Peak Gain

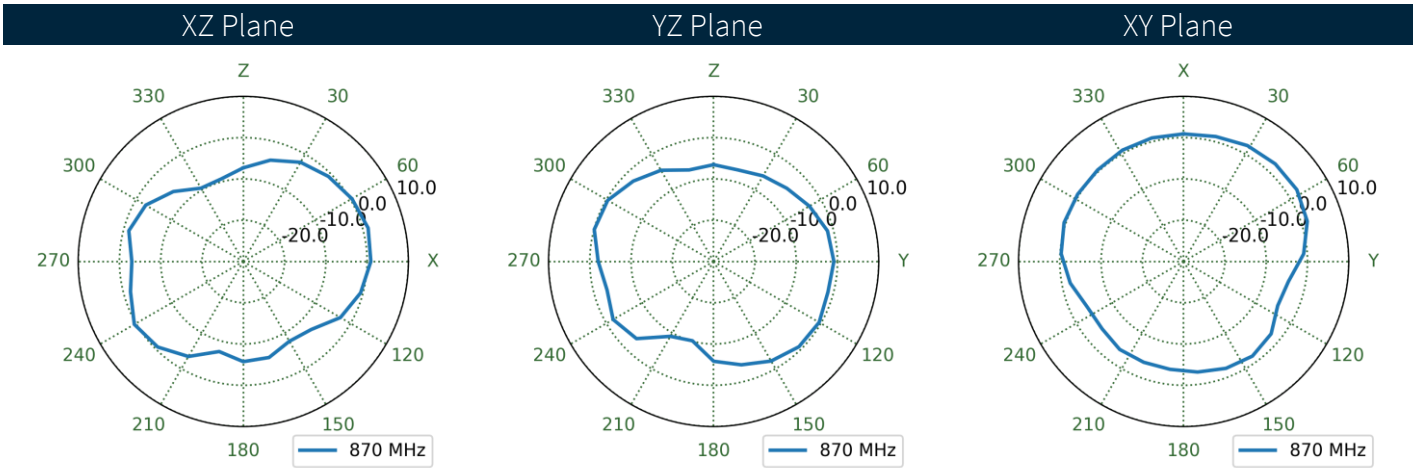
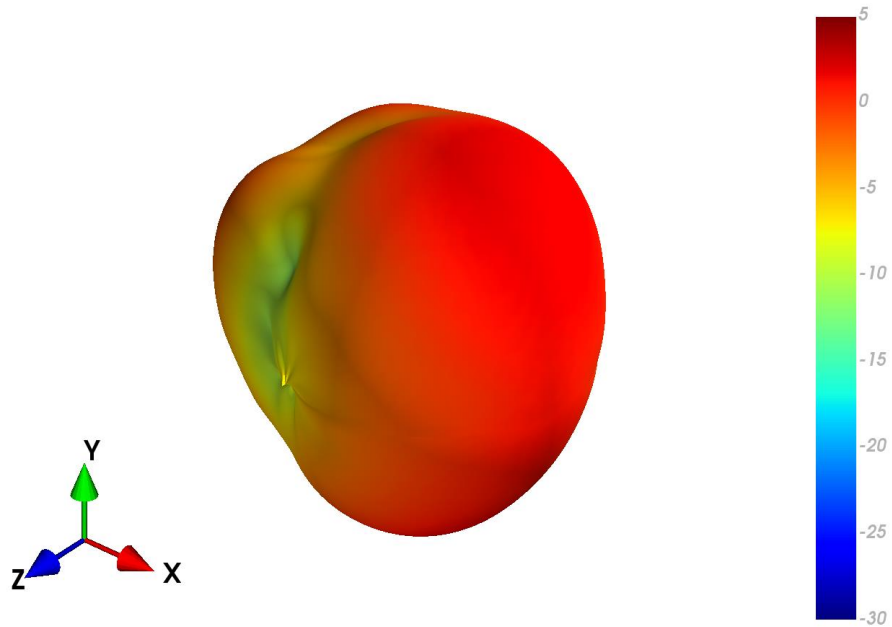


4. Radiation Patterns

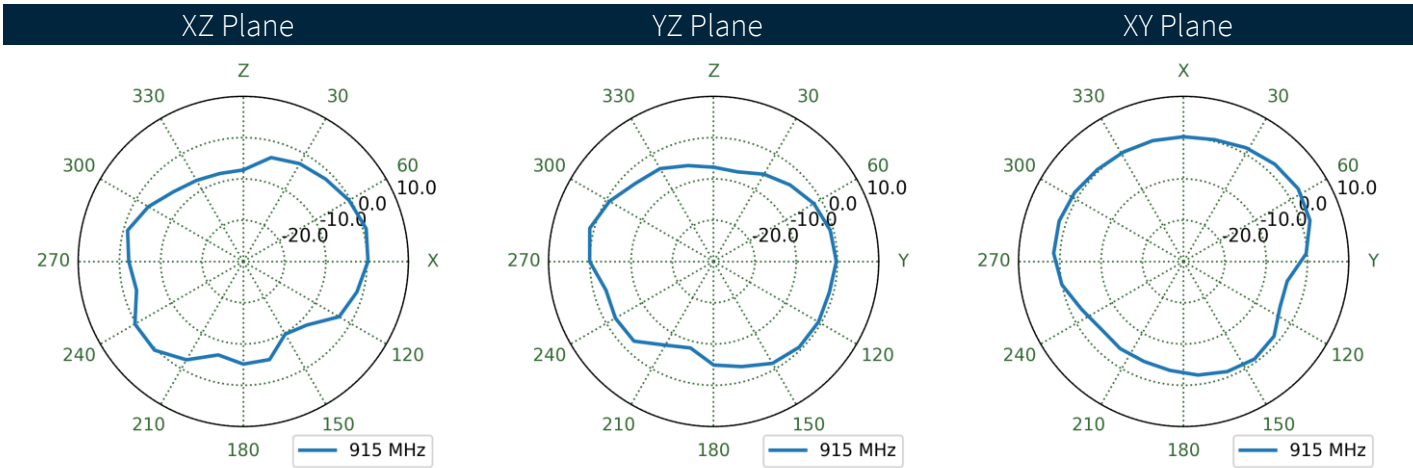
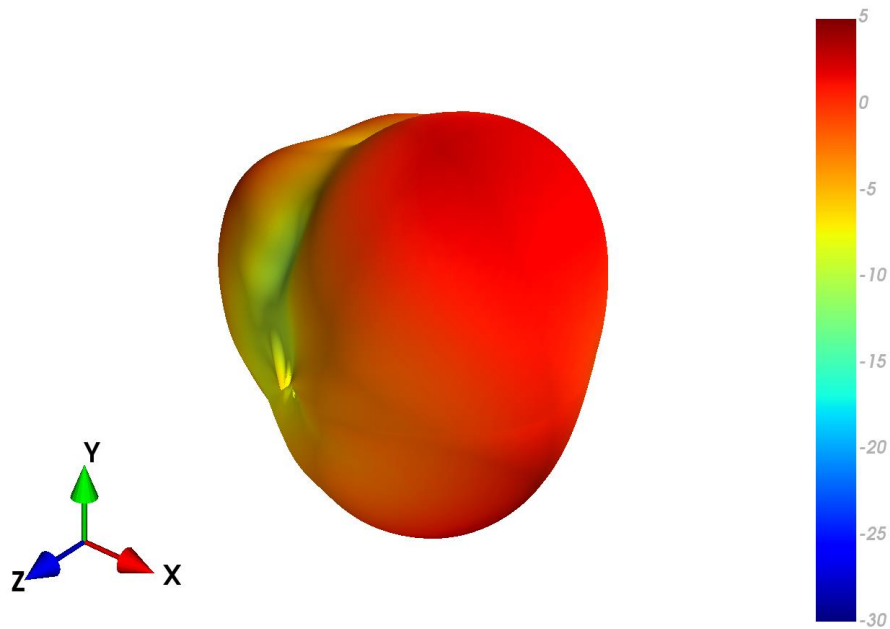
4.1 Test Setup



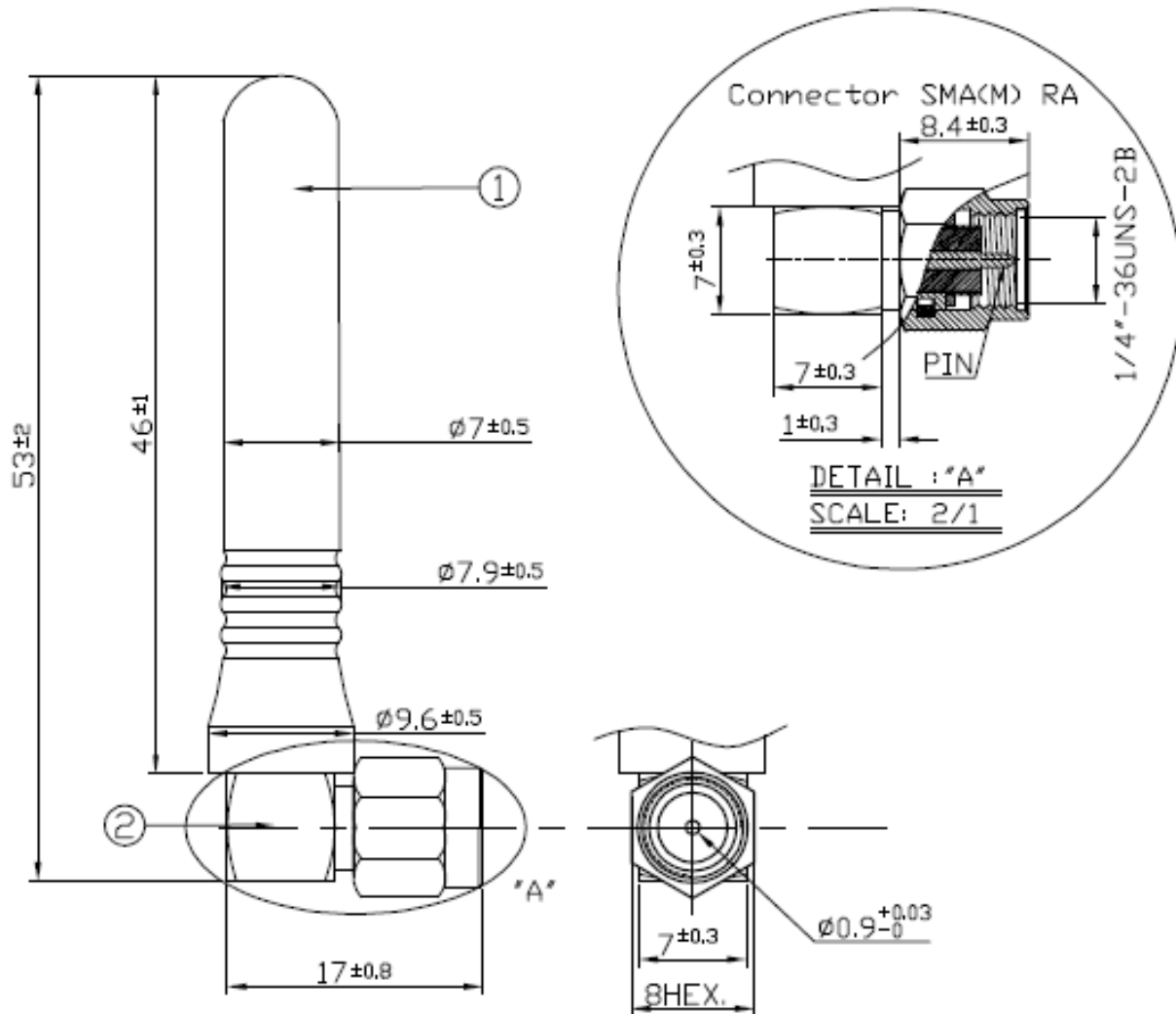
4.2 TI.08.C.0112_Chamber Patterns at 868 MHz



4.3 TI.08.C.0112_Chamber Patterns at 915 MHz



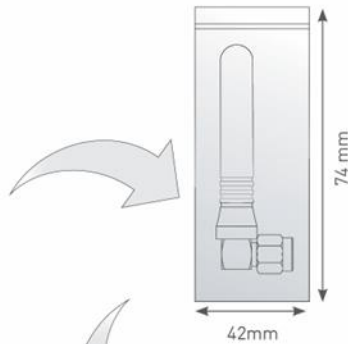
5. Mechanical Drawing



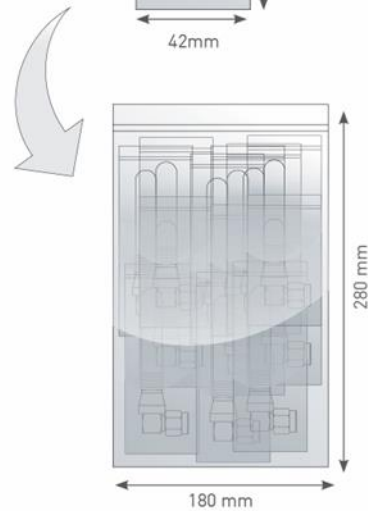
	Name	P/N	Material	Finish	QTY
①	Antenna Cover	000111G000002A	TPU	Black	1
②	SMA(M) RA	210211G010002A	Brass	Gold	1

6. Packaging

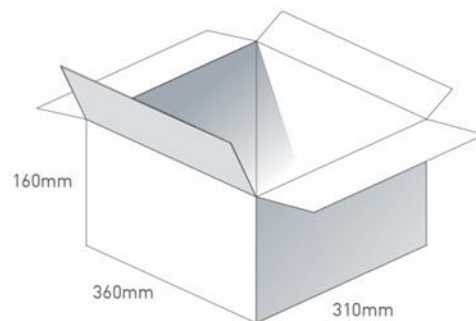
1 pcs TI.08.C.0112 per PE Bag
 PE Bag Dimensions - 42*74mm
 Weight - 7.5g



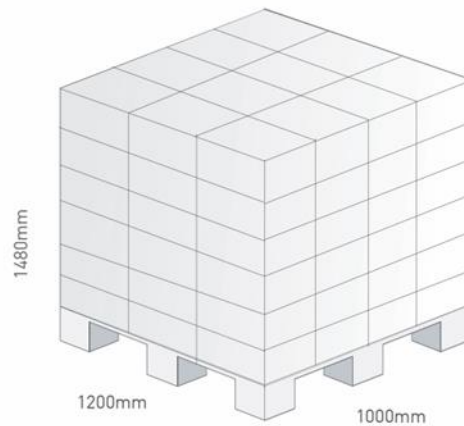
100 PE Bags per Large PE Bag
 100 pcs TI.08.C.0112 per Large PE Bag
 Large PE Dimensions - 180*280mm
 Weight - 0.761kg



15 Large PE bags per carton
 1500 pcs TI.08.C.0112 per carton
 Carton Dimensions - 360*310*160mm
 Weight - 12kg



Pallet Dimensions 1200mm*1000mm*1480mm
 72 Cartons per Pallet
 9 Cartons per layer
 8 Layers



Changelog for the datasheet

SPE-11-8-039 – TI.08.C.0112

Revision: D (Current Version)

Date:	2022-12-09
Changes:	Full datasheet update
Changes Made by:	Gary West

Previous Revisions

Revision: C

Date:	2019-04-02
Changes:	Added new introduction and data
Changes Made by:	Jack Conroy

Revision: B

Date:	2011-11-15
Changes:	Packaging amended
Changes Made by:	Aine Doyle

Revision: A (Original First Release)

Date:	2011-07-16
Notes:	
Author:	Aine Doyle



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