



Specification

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Spec No. : **FXP240**
Part No. : **FXP240.07.0100A**
Model : 433MHz ISM Band Flex Circuit Antenna
Features : 75*45*0.1mm
100mm Ø1.13 Cable
RoHS ✓



VERSION	DATE	PAGE	DESCRIPTION	CENTRE	APPROVED
A	09/21/2009	All	Antenna Specifications	Taiwan	Ruben F. Cuadras



Specification

I. OVERVIEW

The Taoglas FXP240 433 MHz ISM Antenna covers from 433-435 MHz used in the 433 MHz ISM (Industrial Scientific Medical) Band. The antenna has been designed in a flexible material with a square form-factor and cable connection for an easy installation. The antenna works on different plastic materials and thickness. We have selected a piece of ABS with 2 mm of thickness as a baseline for testing.

II. ANTENNA CHARACTERISTICS

Parameter	Specification
Frequency Range	433MHz to 435MHz
Return Loss (dB)	-20
Gain (dBi)	0
Impedance	50 Ω
VSWR	≤2:1
Polarization	Linear
Power Handled	5W
Operation Temperature	-40°C ~ +85°C
Storage Temperature	-40°C ~ +85°C
Dimensions	75*45*0.1mm
Weight	1.5g
Connector	MHFII (U.FL Compatible)
Cable Standard	Mini-Coax 1.13 mm
Cable Length and color	100mm, Black
RoHS Compliant	Yes
Adhesive	3M 467



Specification

III. TEST SET UP

Rhode & Schwartz ZVL6 Vector Network Analyzer

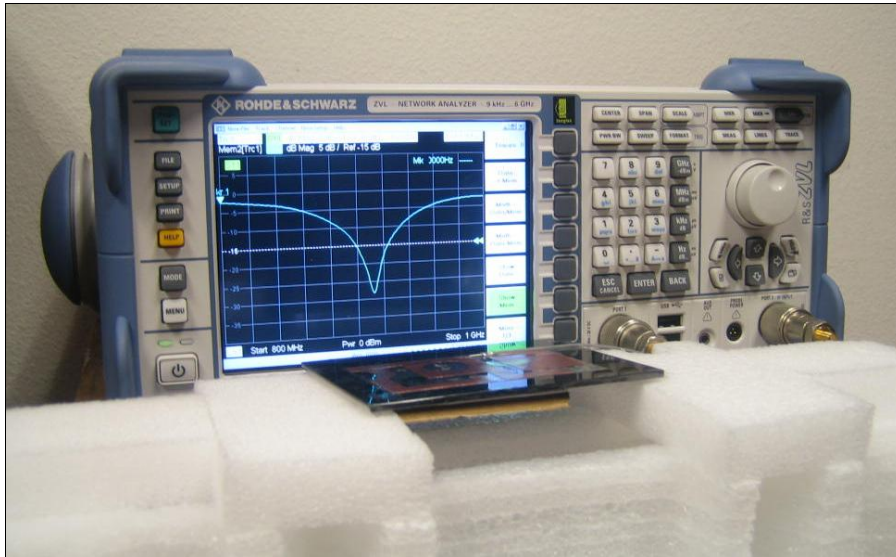


Figure 1. Network Analyzer.



Specification

IV. ANTENNA PARAMETERS

The next antenna parameter graphs like Return Loss, VSWR and smith chart were measured in the Agilent Rhode & Schwartz ZVL6 Vector Network Analyzer.

A. Return Loss Data

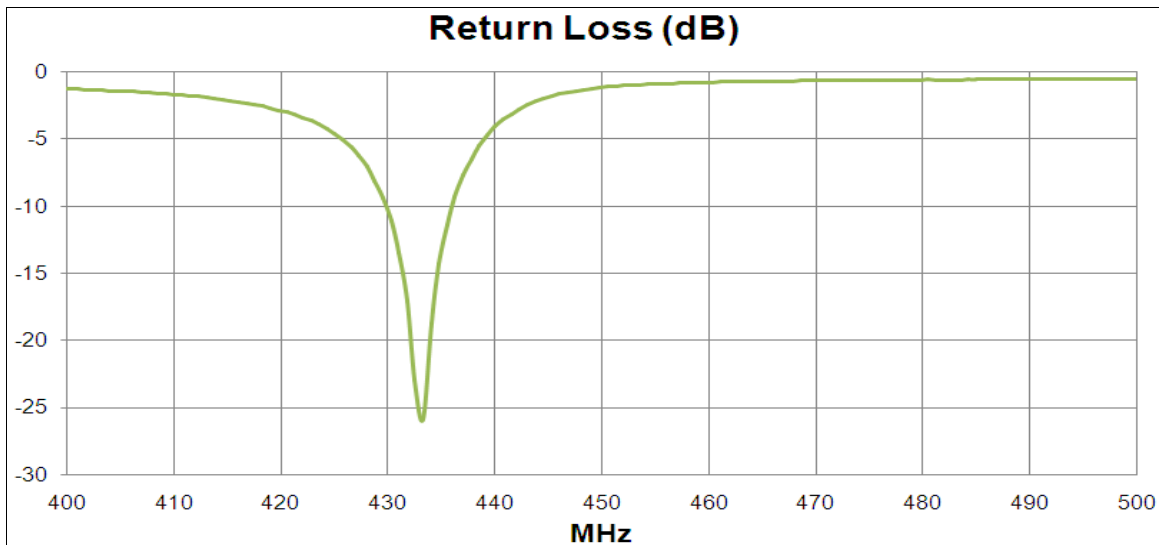


Figure 2. Return Loss for the FXP240 Antenna.

B. VSWR Data

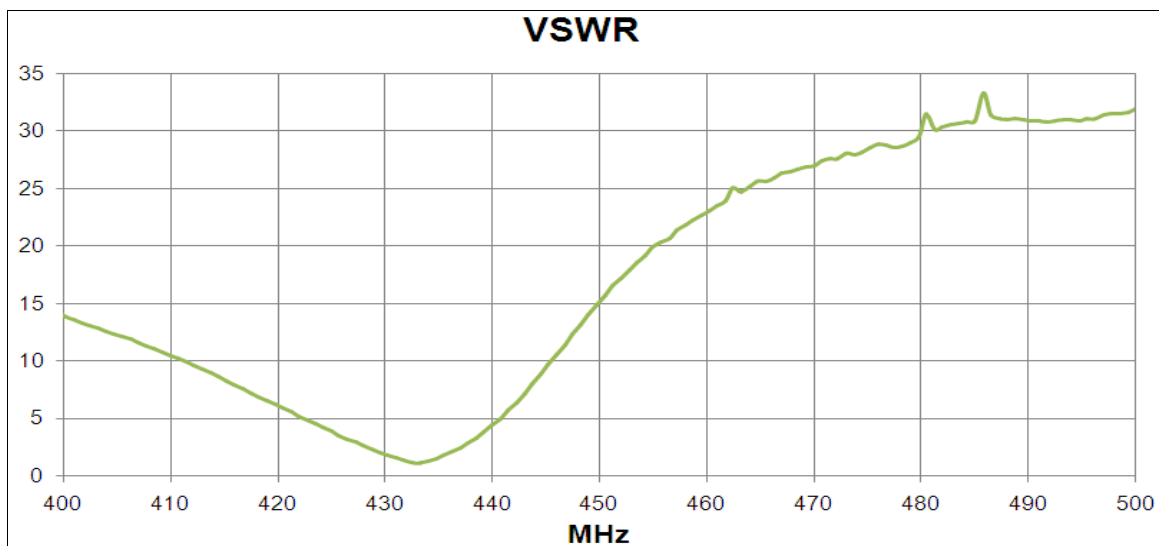


Figure 3. VSWR for the FXP240 Antenna.

Specification

C. Smith Chart Data

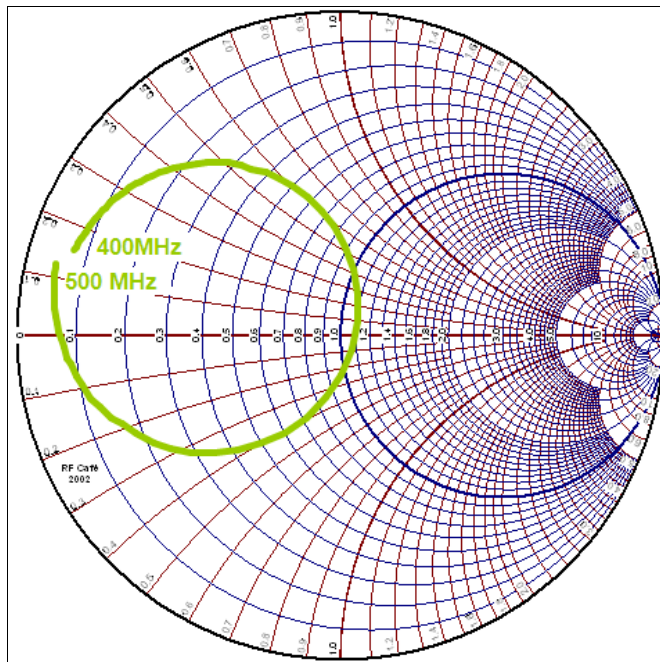
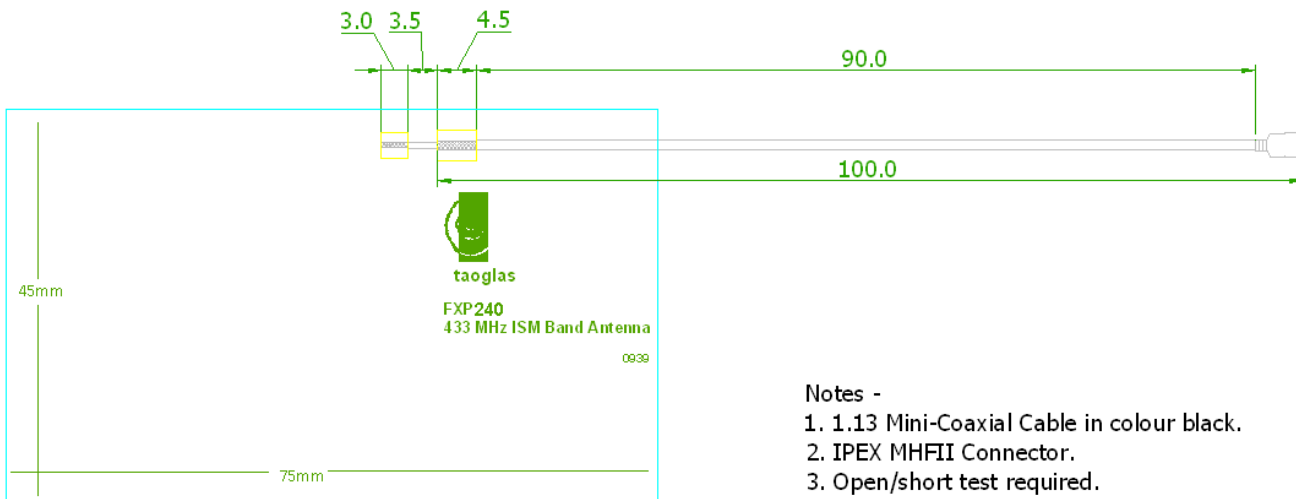



Figure 4. Smith Chart for the FXP240 Antenna.

V. MECHANICAL DRAWING



XXX.	±2.0	PART NO		PRODUCT NAME			
XX.	±1.0	FXP240		FXP240 433 MHz ISM Band Antenna			
X.	±0.5						
.X	±0.1	REV	UNIT	SCALE	SIZE	SHEET	CUSTOMER
.XX	±0.05	A	mm	1/1	A 4	1 OF 1	taoglas



SD Design Centre

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Figure 5. Mechanical Drawing for the FXP240 Antenna.