

# UWB (600-6000 MHz) Flexible Antenna



AFAC120050-U6G



120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Features

- Cellular 4G/LTE 2G/3G/GSM support
- Dualband 2.4/5 GHz WiFi
- GNSS band coverage
- Linear polarization
- High gain of 5 dBi
- Cable and connector (IPEX)
- Peel and stick with 3M tape

## Applications

- IoT
- M2M
- Cellular, WiFi, ISM, GNSS applications
- Home automation
- Smart city
- Wearables
- Transportation

## Electrical Specifications

| Parameters      | Min.   | Typ.       | Max. | Units    | Note                   |
|-----------------|--------|------------|------|----------|------------------------|
| Frequency Range |        | 698 ~ 6000 |      | MHz      |                        |
| VSWR            |        |            | 4.0  |          | Mount on NYLON Surface |
| Polarization    | Linear |            |      |          |                        |
| Impedance       |        | 50         |      | $\Omega$ |                        |
| Gain            |        |            | 5    | dBi      | Zenith                 |

## Environmental Characteristics

| Parameters                  | Description                               |
|-----------------------------|-------------------------------------------|
| Operating temperature range | -40°C to +85°C                            |
| Vibration                   | 10 to 55 Hz with 1.5 mm amplitude 2 hours |

## Mechanical Characteristics

| Description | Material     |
|-------------|--------------|
| Connector   | IPEX         |
| Cable Type  | RF 1.37/10CM |
| Mounting    | Adhesive     |

# UWB (600-6000 MHz) Flexible Antenna

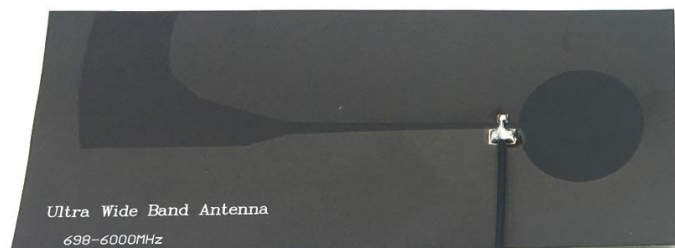


AFAC120050-U6G

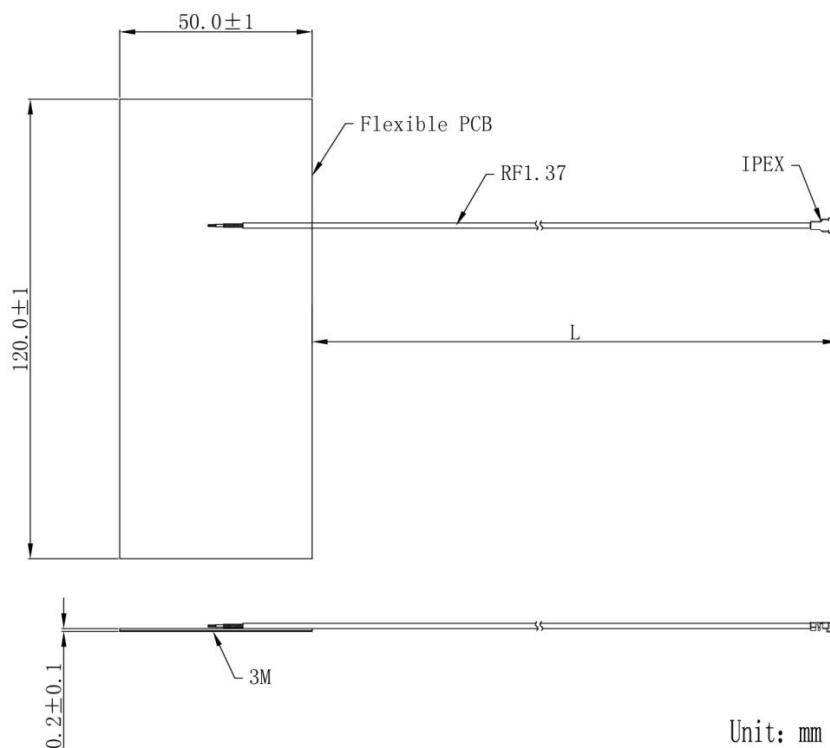


120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Product Image



## Dimensions



# UWB (600-6000 MHz) Flexible Antenna

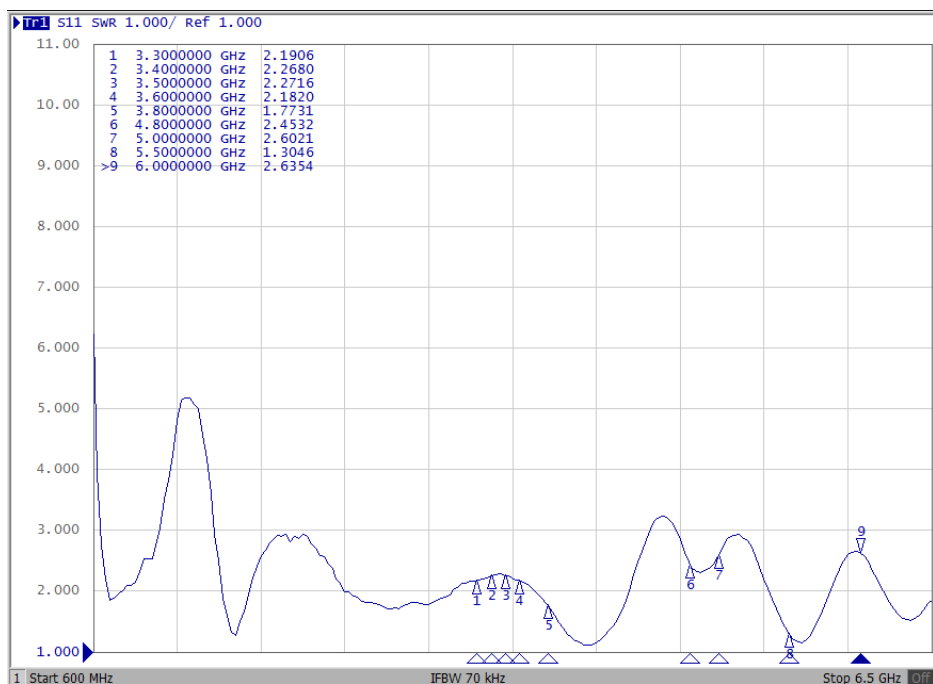
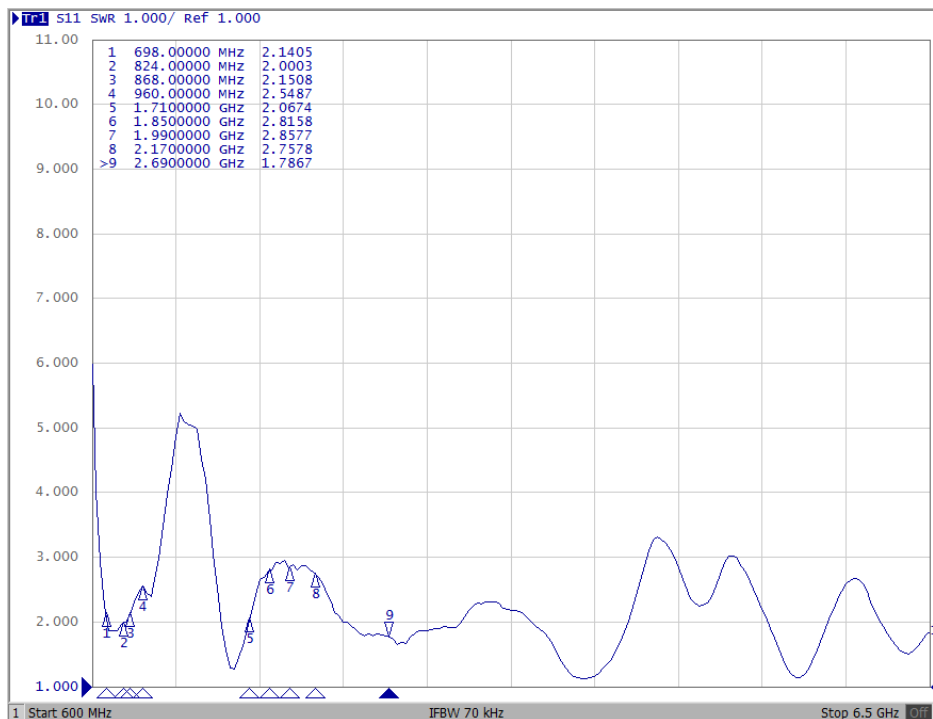


AFAC120050-U6G



120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## VSWR



# UWB (600-6000 MHz) Flexible Antenna

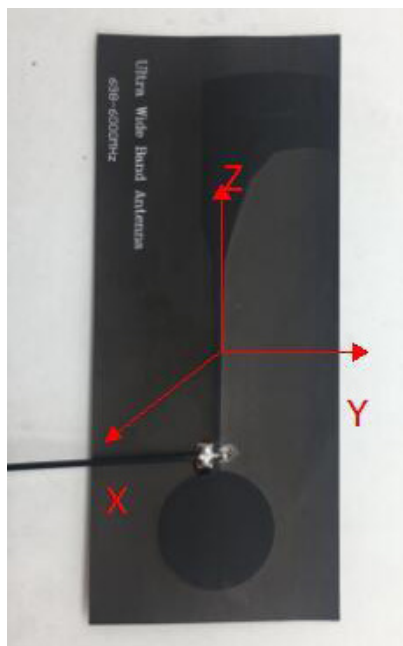


AFAC120050-U6G



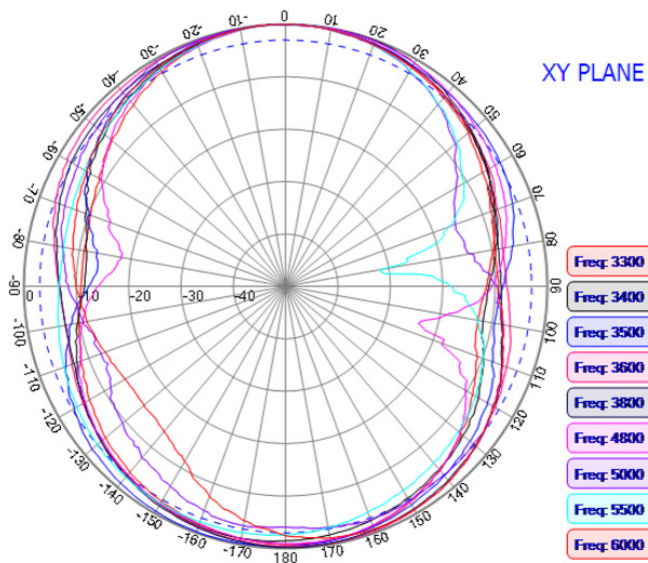
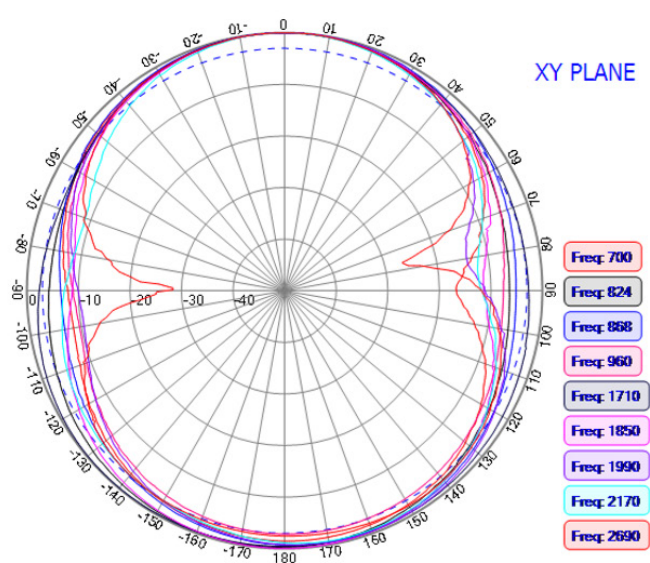
120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Radiation Patterns



### 2D Patterns

#### XY Plane



# UWB (600-6000 MHz) Flexible Antenna

AFAC120050-U6G

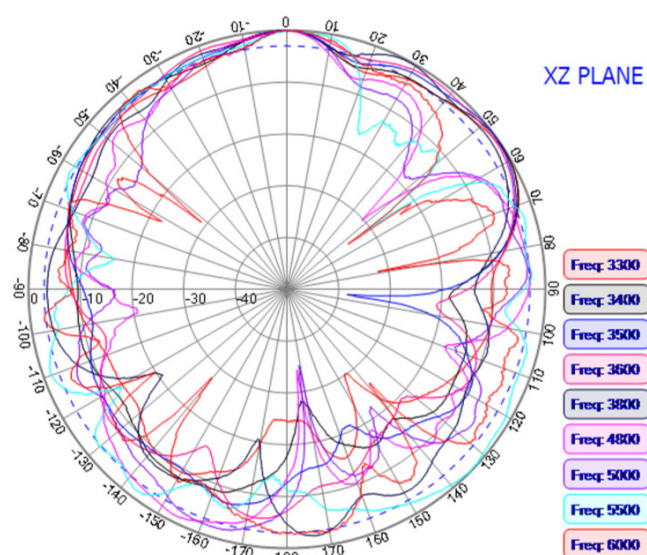
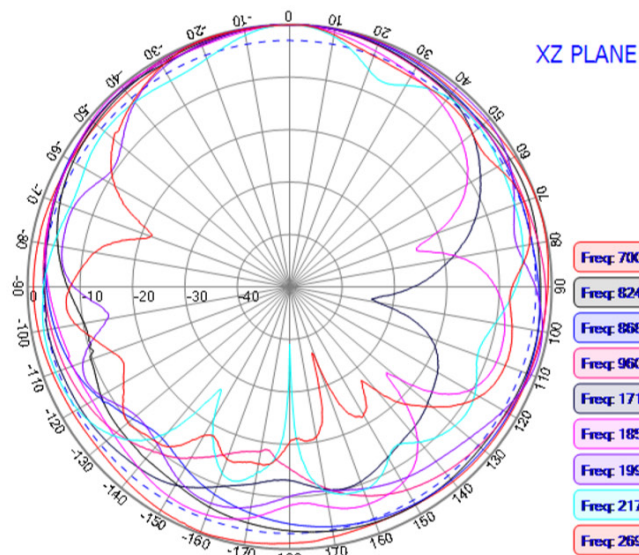


120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

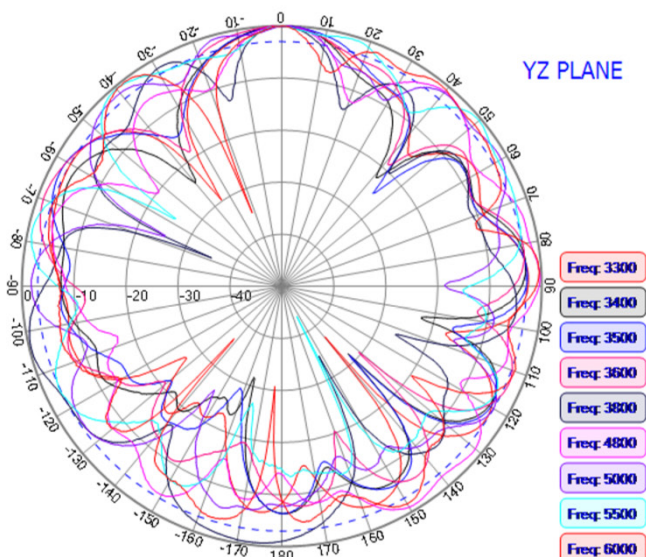
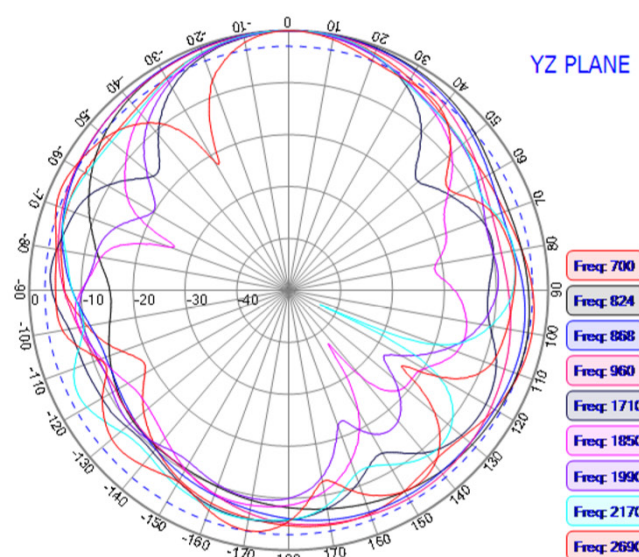
## Radiation Patterns

### 2D Patterns

#### XZ Plane



#### YZ Plane



# UWB (600-6000 MHz) Flexible Antenna



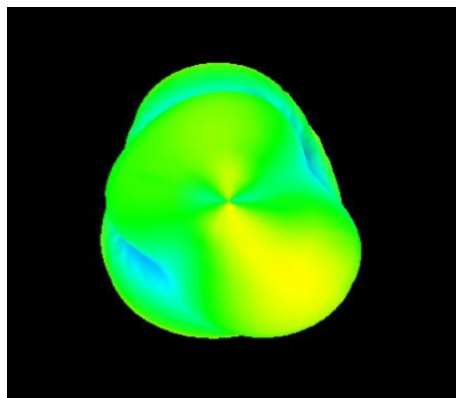
AFAC120050-U6G



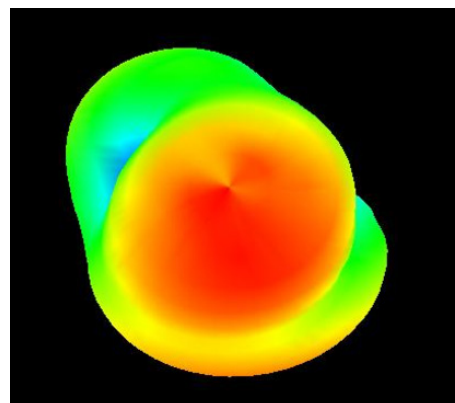
120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## 3D Radiation Patterns

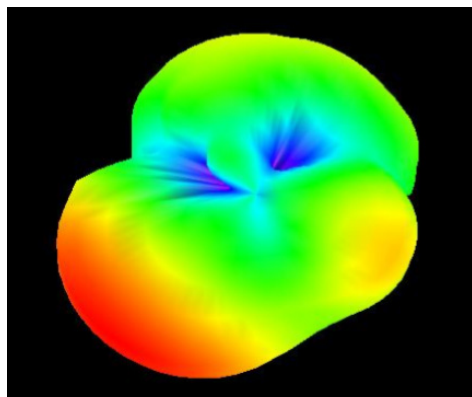
698 MHz



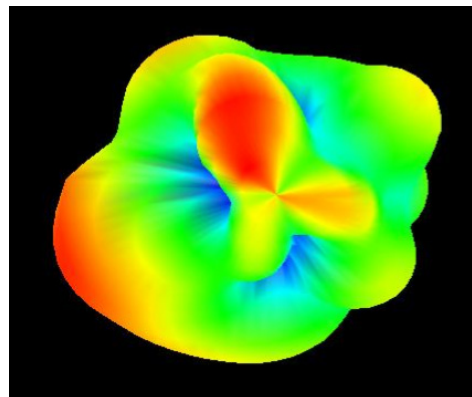
960 MHz



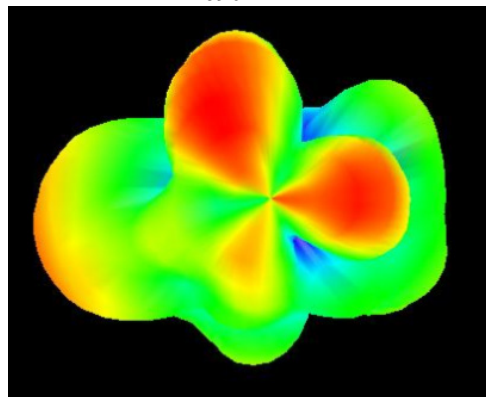
1710 MHz



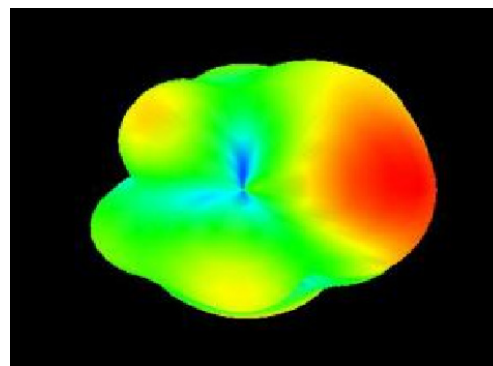
2710 MHz



2690 MHz



3800 MHz



# UWB (600-6000 MHz) Flexible Antenna



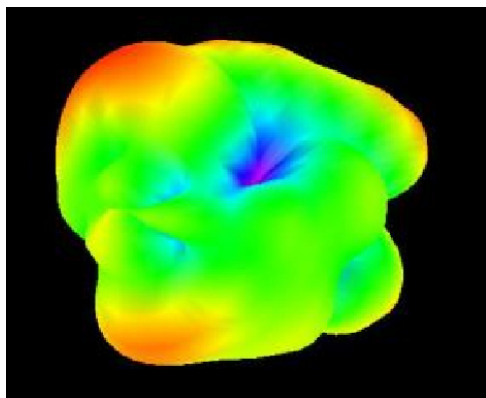
AFAC120050-U6G



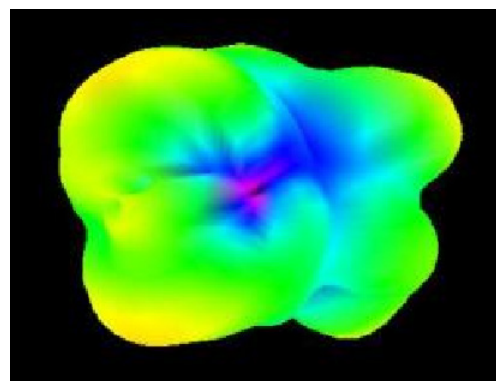
120.0 x 50.0 x 0.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## 3D Radiation Patterns

4800 MHz



5800 MHz



| Frequency (MHz) | Efficiency | Gain (dBi) |
|-----------------|------------|------------|
| 698             | 0.59       | 2.51       |
| 824             | 0.64       | 3.73       |
| 960             | 0.67       | 5.32       |
| 1710            | 0.63       | 4.63       |
| 2170            | 0.58       | 2.67       |
| 2690            | 0.61       | 3.78       |
| 3800            | 0.57       | 2.18       |
| 4800            | 0.59       | 2.33       |
| 5800            | 0.58       | 1.98       |

## Packaging

The package has 1000 pcs of antennas and is of dimension 37 x 36 x 17 cm.

**ATTENTION:** Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01.28.2019

ABRACON IS  
ISO9001-2015  
CERTIFIED