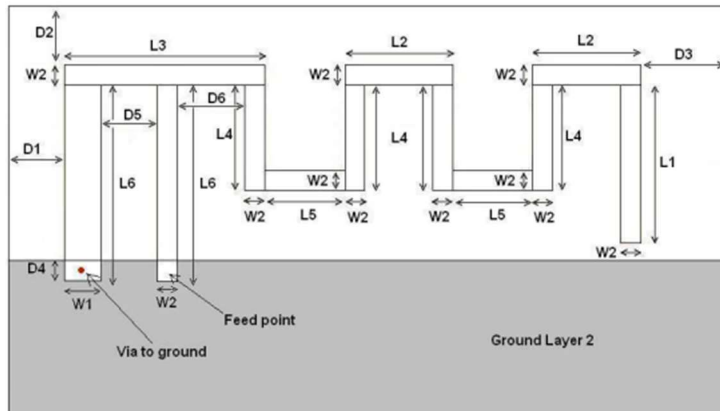


## PT40-Q Antennas Description

### Bluetooth Antenna

The PT40-Q covers the 2.4 GHz ISM band between the frequencies of 2402 MHz and 2480 MHz. The antenna used in the product is a meandered Printed Inverted-F Antenna (PIFA).

#### Dimensions:

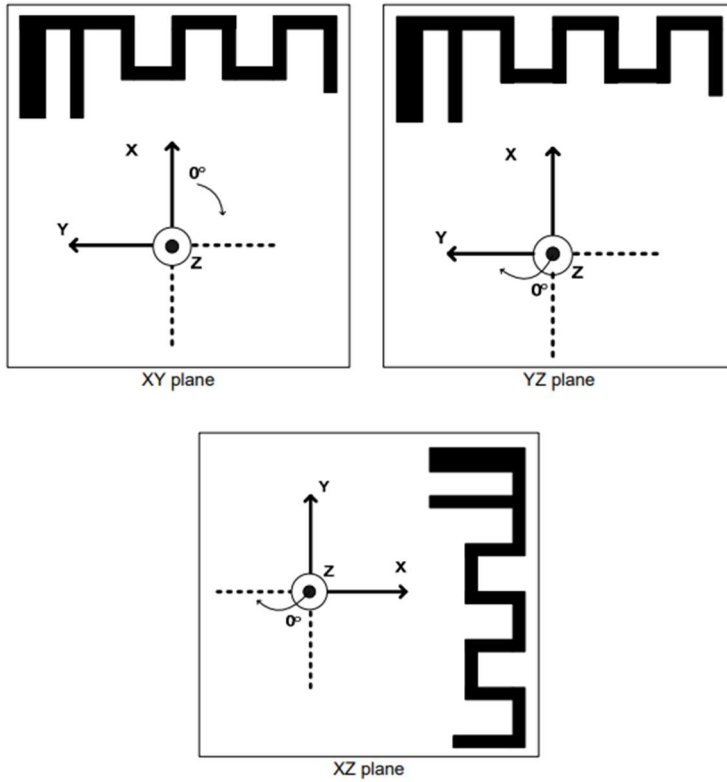


L1	3.94 mm
L2	2.70 mm
L3	5.00 mm
L4	2.64 mm
L5	2.00 mm
L6	4.90 mm
W1	0.90 mm
W2	0.50 mm
D1	0.50 mm
D2	0.30 mm
D3	0.30 mm
D4	0.50 mm
D5	1.40mm
D6	1.70 mm

### Characteristics:

The antenna is designed to have a reflection of less than -10 dB across the 2.4 GHz ISM band, when connected to a 50 ohm source.

### Reference planes:



### The gain was measured as follows:

Gain in XY plane	< 2dBi
Gain in XZ plane	< 2dBi
Gain in YZ plane	< 2dBi

## LTE Antenna

The PT40-Q covers the following LTE bands: 2, 4, 5, 12 and 13. The antenna uses stamped metal pieces over a plastic mount. The antenna is permanently attached to the PCB with 2 small screws.

### Picture



### Antenna Gain

The antenna gain has been determined by using the TRP measurements from an accredited laboratory and extracting the antenna gain from these measurements.

LTE Band	Maximum gain
Band 2	-2.2 dB
Band 4	-2.3 dB
Band 5	-4.8 dB
Band 12	-5.7 dB
Band 13	-5.4 dB