

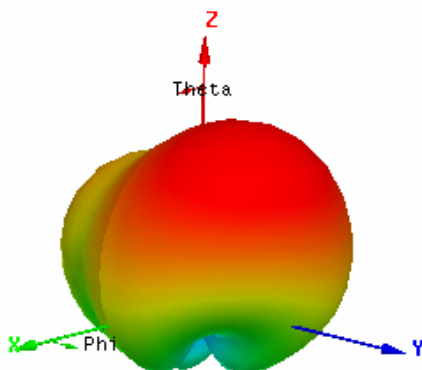
Generic PIFA antenna 5.8 GHz

The generic PIFA antenna has been developed to validate upstream the choice of an integrated solution, taking into account the size of the PCB and the effect of the radom on antenna performances. The 5.8 GHz antenna covers the following applications: ISM, WLAN, HYPERLAN.

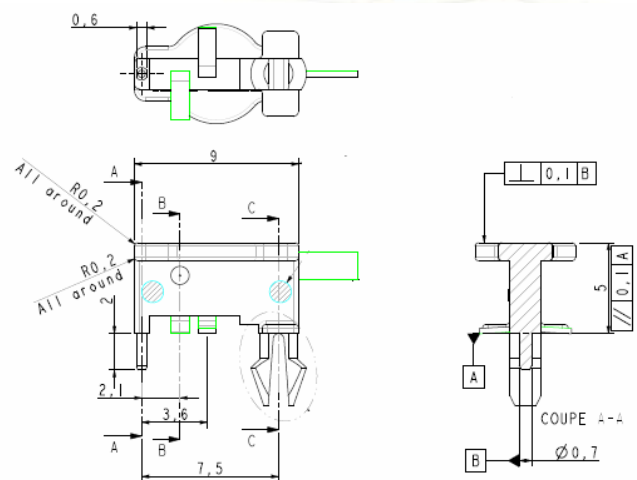
The antenna has been designed to answer the technical characteristics stated below. It can be integrated on a PCB (step 1) and tuned in order to optimize these characteristics with a specific environment. The adjustment can be done easily, using a scalar network by cutting the antenna to the appropriate length (step 2).

TECHNICAL CHARACTERISTICS	
Frequency range	5.8 GHz
Impedance	50 Ohms
VSWR	< 2
Power Rating	20 W
Peak gain	2 dBi
Mean gain	0 dBi

RADIATION PATTERN



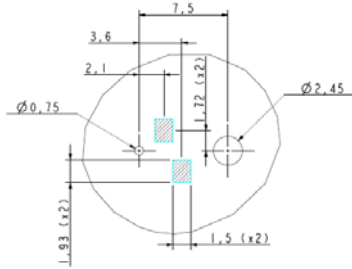
The radiation pattern is omni directionnal



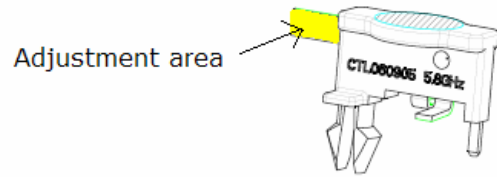
MECHANICAL DESIGN

STEP 1: Plug the antenna on the PCB using the following mechanical instructions

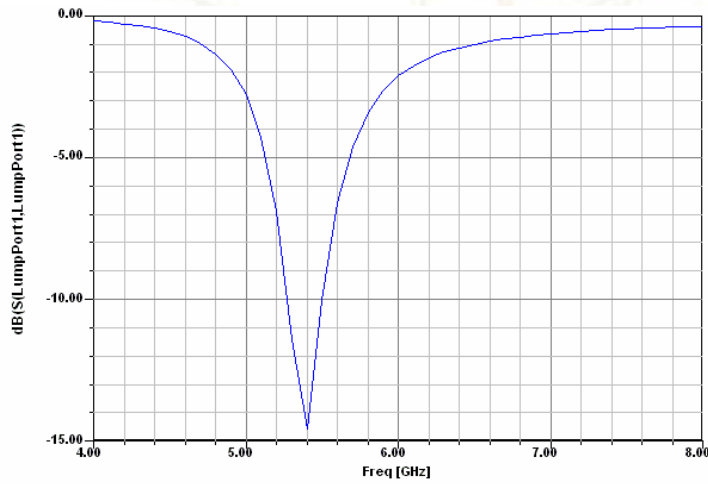
Implantation antenne
 PCB layout antenna
 Epaisseur PCB préconise: 1.60 ±0.10
 PCB thickness recommend : 1.60 ±0.10



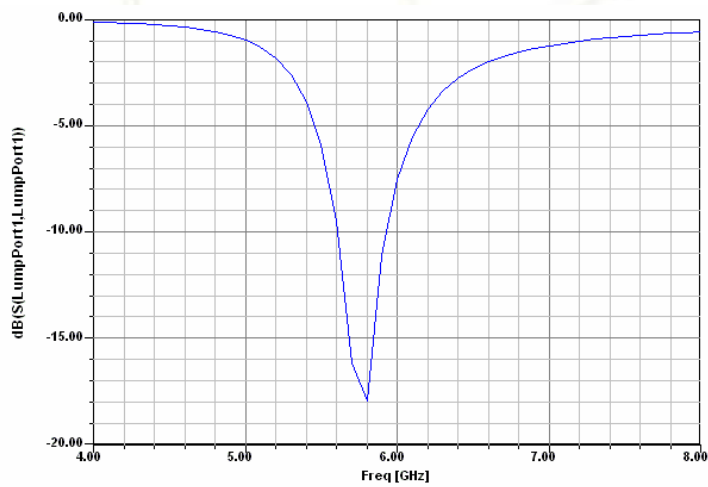
STEP 2: Adjust the length of the antenna



Example of VSWR adjustment



Before adjustment



After adjustment

