

Antenna Stripline Spreadsheet Calculator

Here are some instructions:

- 1) Enable the Macros when you open the Excel file included in this package.
- 2) In the Excel file, the customer has to fill the yellow boxes ONLY, meaning:
 - copper thickness of the upper layer of the customer's PCB [B5]
 - total thickness of the dielectric under the antenna line [B10]
 - ground plane thickness [B15]
 - the Dielectric Constant [B3] of the dielectric
- 3) Press the "Calculate Microstrip" button
- 4) In the boxes G3, G4 and G5 you will see the dimensions a, b, c, needed for the antenna stripline on the PCB

Basically the Excel file shows you the section of the PCB. Orange is GROUND, Green is dielectric (the resin of the pcb) and the red one is the antenna strip (hot signal, copper).

So when you insert the data into the table (left) the result is the width of the strip line (red) and the width of the dielectric placed side by side of the strip (green).

The length of the line should be as short as possible to avoid high loss (shorter than 20 cm !!!!).