

4.4 Microstrip dipole

Matlab program

The [program](#), which accompanies the paragraph dealing with moment analysis of the microstrip dipole, is of simple user's interface. First the path of Matlab has to be redirected to the folder **M_dipol**. Then in the command window of Matlab, the basic m-file `mdipol.m` has to be run, and an appearing form has to be filled in. In the form, the operation frequency of the antenna, length a width of the dipole, height and relative permittivity of the dielectric substrate have to be given. Then, the program prints the input impedance of the dipole, and in an independent window, current distribution on the dipole is drawn.

The program uses a fixed number of discretization elements ($N = 33$), the excitation gap is positioned to the center of the dipole.