Problem info

Problem type: Electrostatics
Geometry model class: Plane-Parallel
Problem database file names:

- Problem: *microstrip_capacitance.pbm*
- Geometry: *Microstrip.mod*
- Material Data: *Microstrip_capacitance.des*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

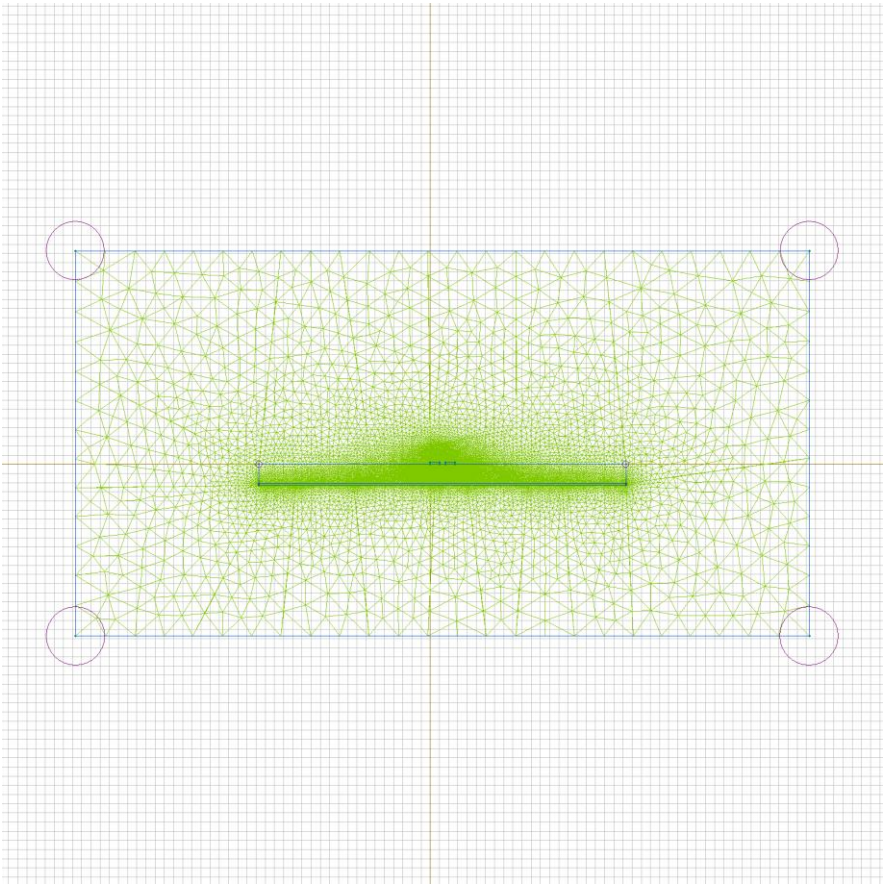


Table 1. Geometry model statistics

	With Label	Total
Blocks	5	5
Edges	4	21
Vertices	0	18

Number of nodes: 41831.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

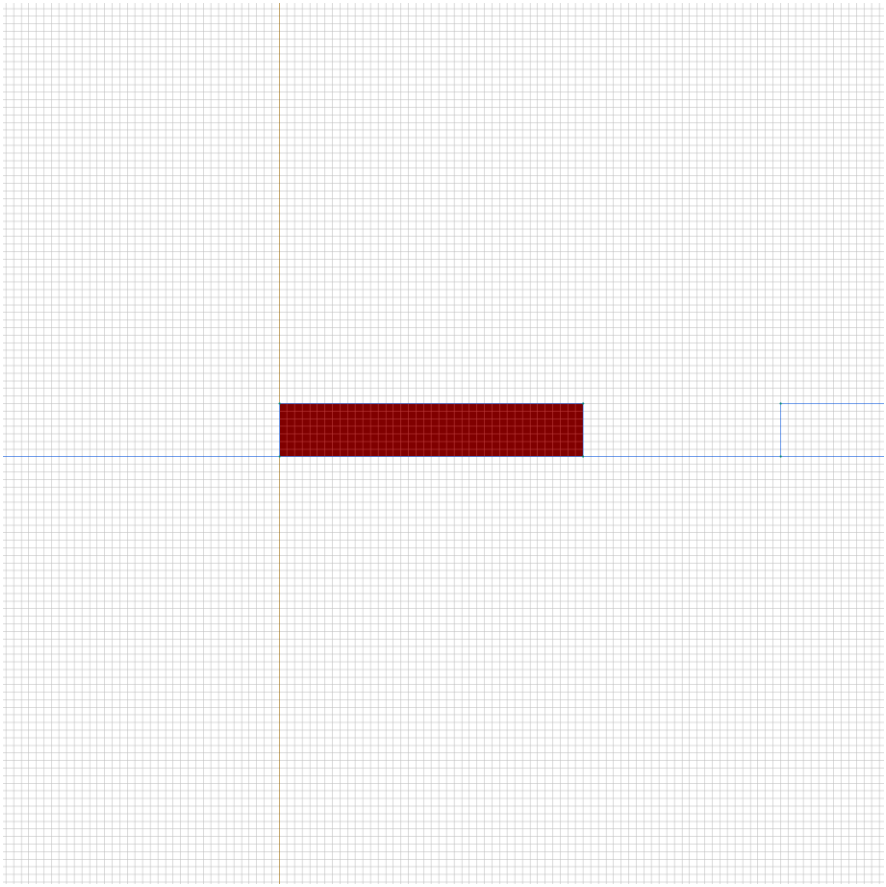
Blocks:	Edges:	Vertices:
• trace1 • dielectric • trace2 • ground • air •	• V+ • V- • V0 • boundary •	

Detailed information about each label is listed below.

Labelled objects: block "trace1"

There are (1) objects with this label

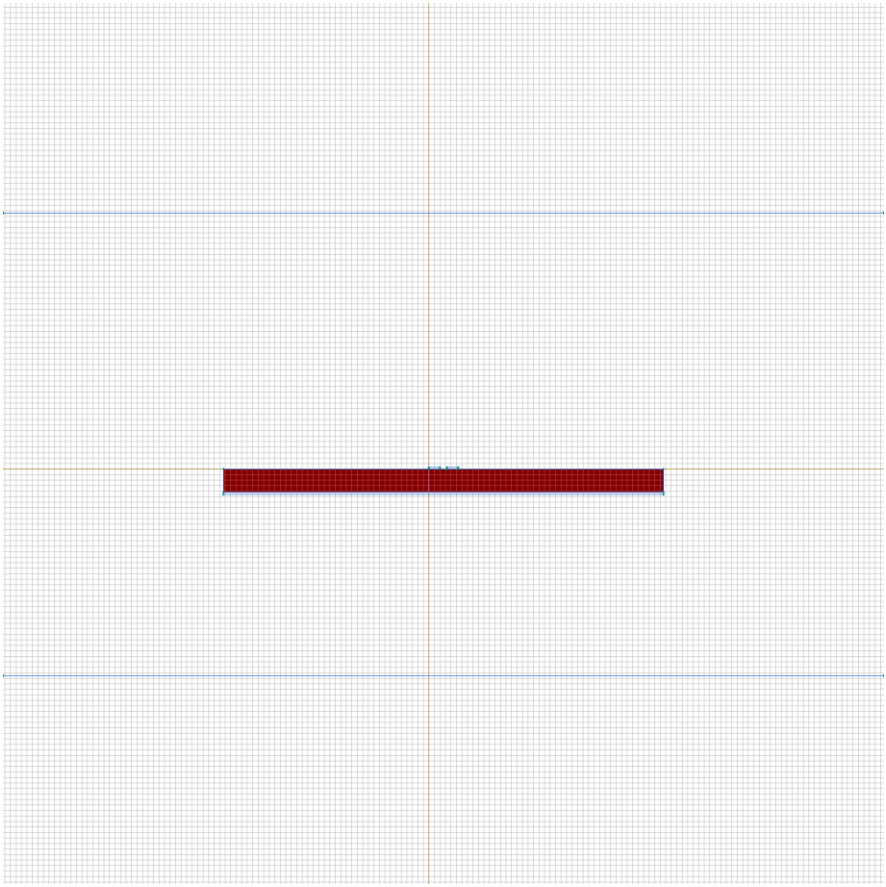
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: block "dielectric"

There are (1) objects with this label

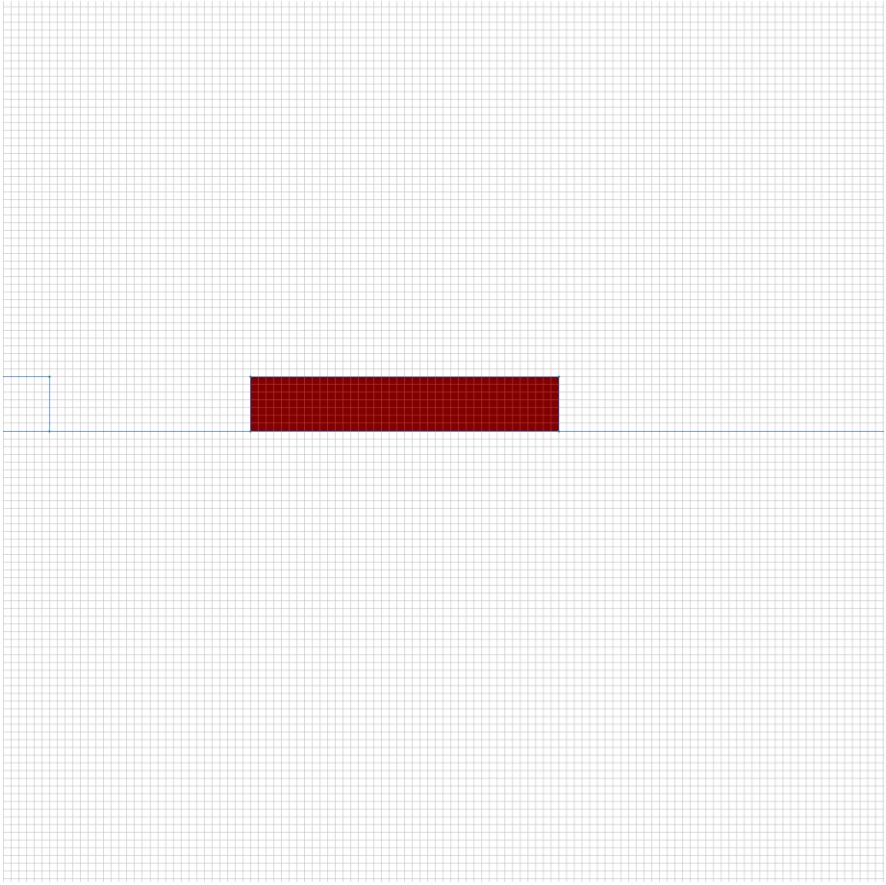
Relative electric permittivity eps_x=4.3, eps_y=4.3



Labelled objects: block "trace2"

There are (1) objects with this label

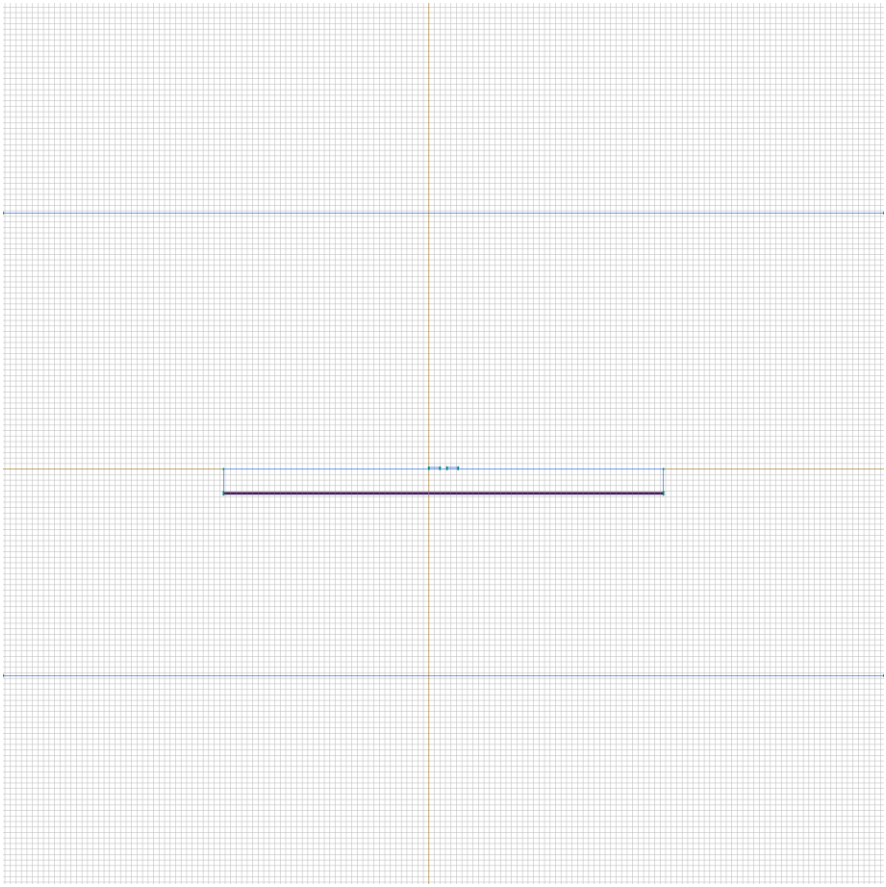
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: block "ground"

There are (1) objects with this label

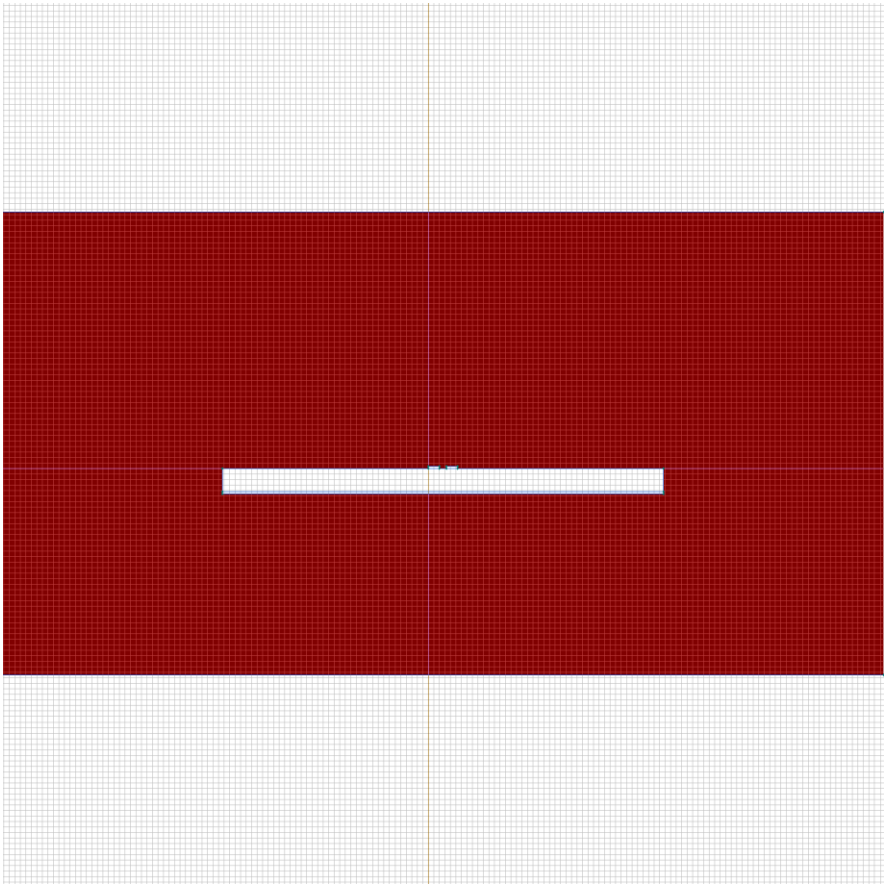
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: block "air"

There are (1) objects with this label

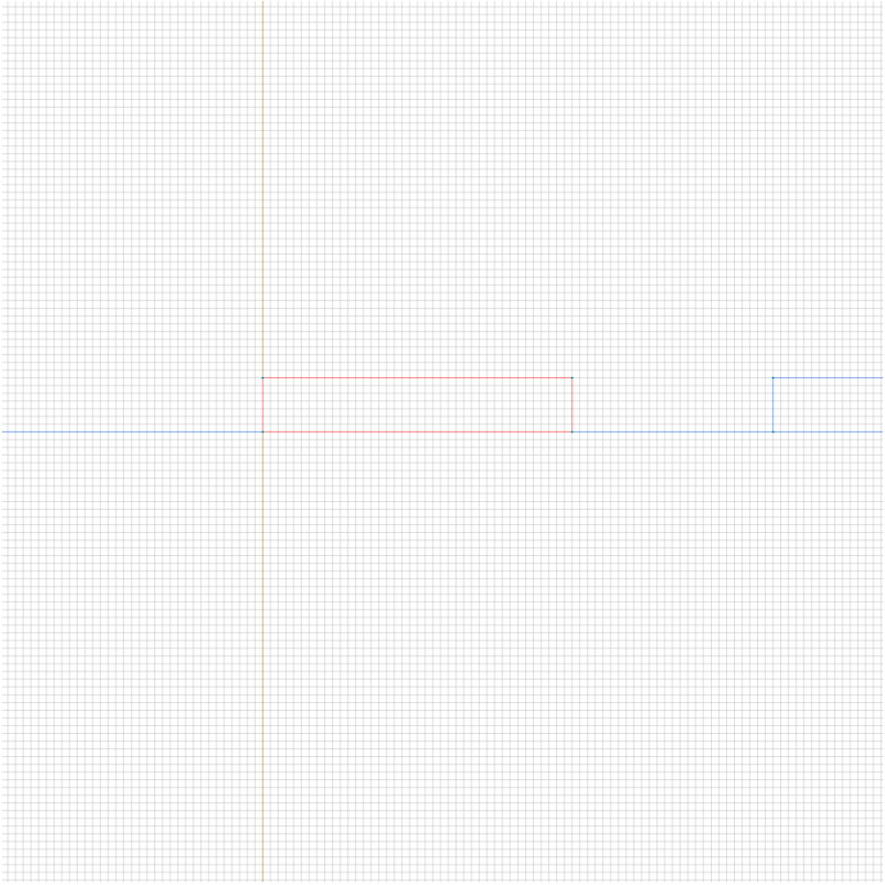
Relative electric permittivity eps_x=1, eps_y=1



Labelled objects: edge "V+"

There are (4) objects with this label

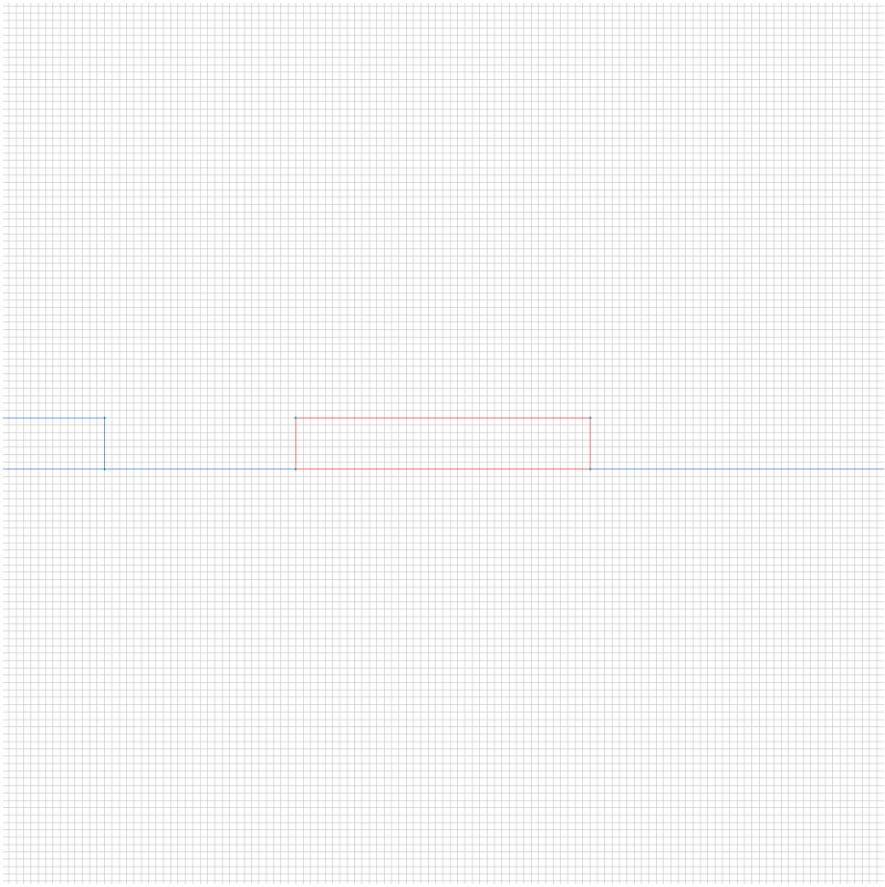
Voltage U=1 [V]



Labelled objects: edge "V-"

There are (4) objects with this label

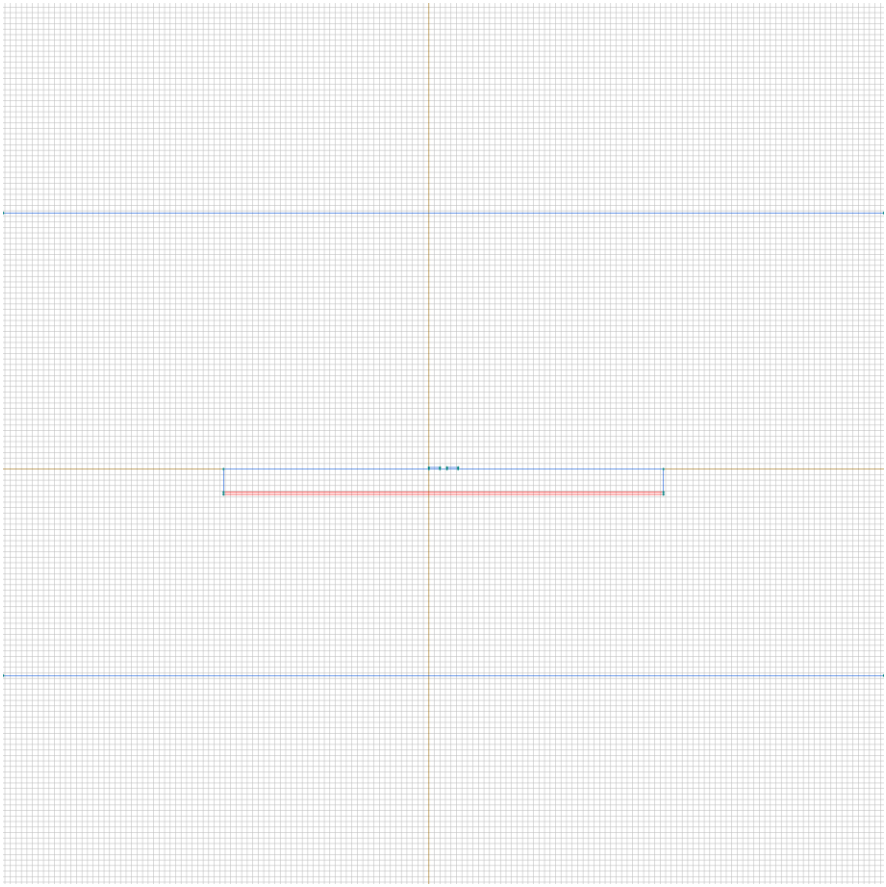
Voltage U=-1 [V]



Labelled objects: edge "V0"

There are (4) objects with this label

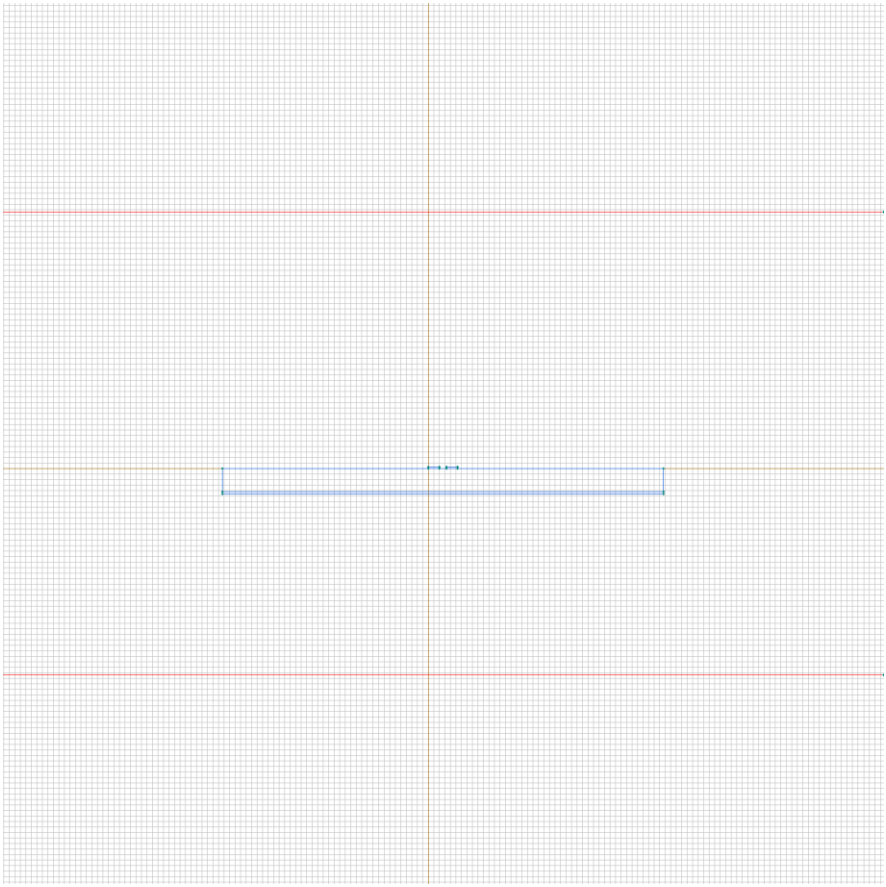
Voltage U=0 [V]



Labelled objects: edge "boundary"

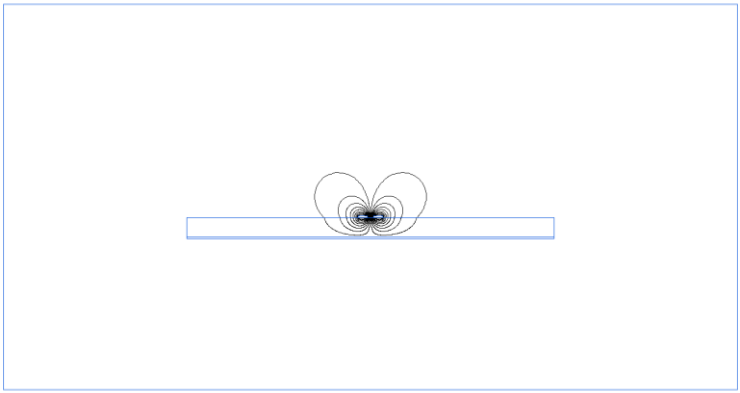
There are (4) objects with this label

Voltage U=0 [V]



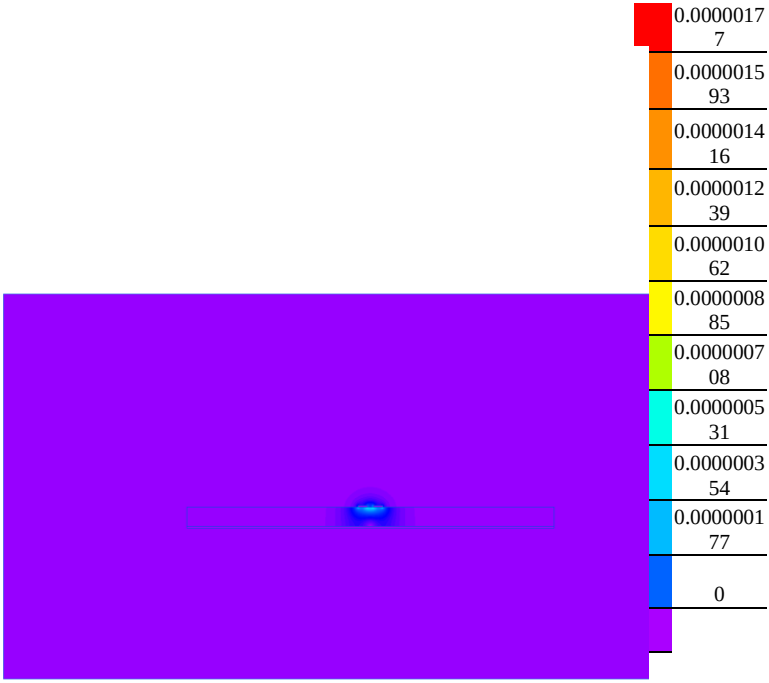
Results

Field lines



Results

Color map of Electric induction |D| [C/m2]



Nonlinear dependencies

No non-linear dependencies are used in this problem data