Problem info

Problem type: AC Magnetics, frequency: 100000000 Hz,

Geometry model class: Plane-Parallel

Problem database file names:

• Problem: *model1.pbm*

• Geometry: Model1.mod

• Material Data: Model1.dhe

• Material Data 2 (library): none

• Electric circuit: none

Results taken from other problems:

none

<u>Problem info</u> <u>Geometry model</u> <u>Labelled Objects</u> <u>Results</u> <u>Nonlinear dependencies</u>

Geometry model

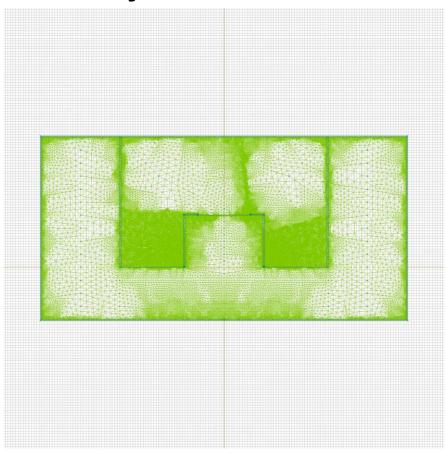


Table 1. Geometry model statistics

	With Label	Total
Blocks	5	5
Edges	0	40
Vertices	0	96

Number of nodes: 72566.

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:
• <u>diel</u>		
• shield		
• <u>elec1</u>		
• <u>elec2</u>		
• <u>air</u>		
•		

Detailed information about each label is listed below.

Labelled objects: block "diel"

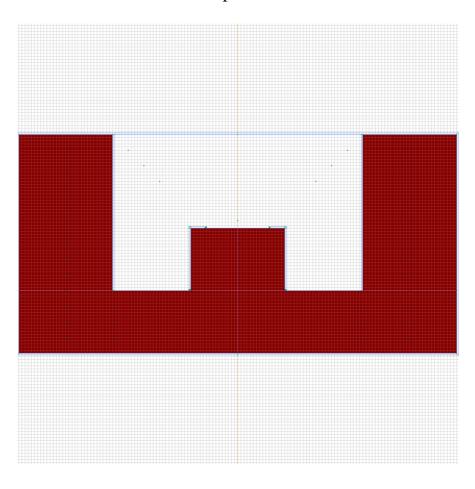
There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1

Electric conductivity: sigma=0 [S/m]

Current density: j=0 [A/m2], phase 0 [deg]

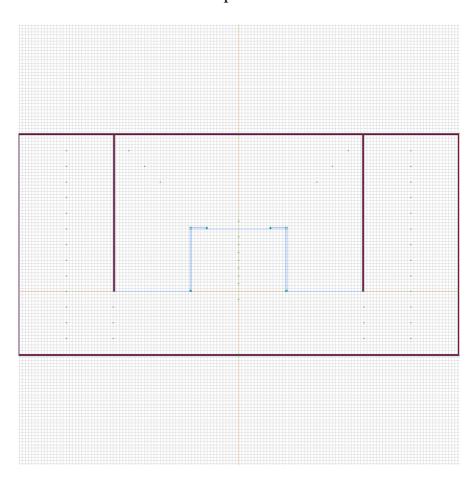
Conductor's connection: in parallel



Labelled objects: block "shield"
There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1 Electric conductivity: sigma=56000000 [S/m] Current density: j=0 [A/m2], phase 0 [deg]

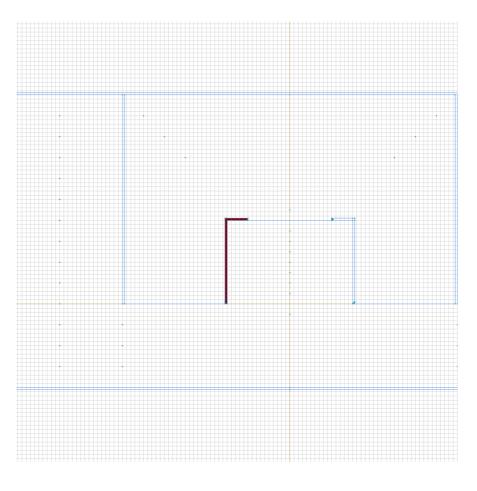
Conductor's connection: in parallel



Labelled objects: block "elec1"
There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1 Electric conductivity: sigma=56000000 [S/m]

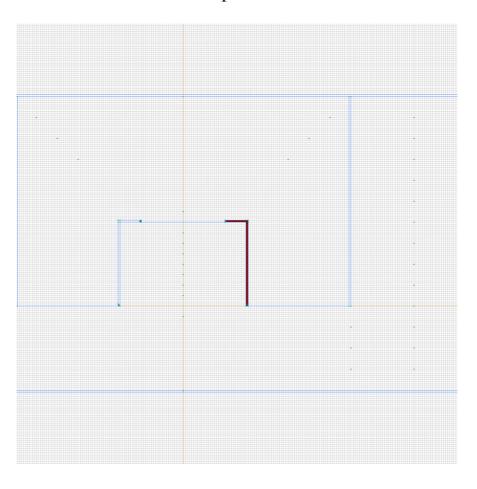
Total current: I=-1 [A], phase 0 [deg] Conductor's connection: in parallel



Labelled objects: block "elec2"
There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1 Electric conductivity: sigma=56000000 [S/m]

Total current: I=1 [A], phase 0 [deg] Conductor's connection: in parallel



Labelled objects: block "air"

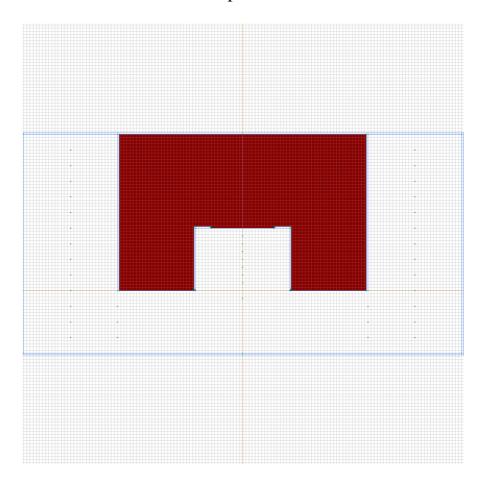
There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1

Electric conductivity: sigma=0 [S/m]

Current density: j=0 [A/m2], phase 0 [deg]

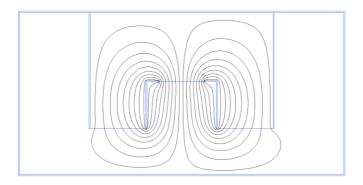
Conductor's connection: in parallel



<u>Problem info</u> <u>Geometry model</u> <u>Labelled Objects</u> <u>Results</u> <u>Nonlinear dependencies</u>

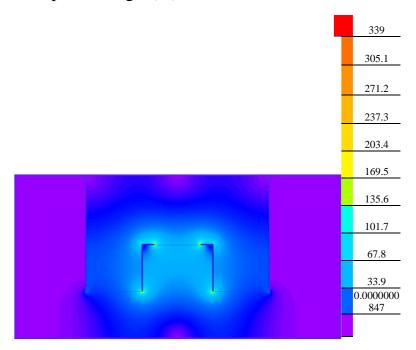
Results

Field lines



Results

Color map of Strength |H| [A/m]



Nonlinear dependencies

No non-linear dependencies are used in this problem data