

Problem info

Problem type: AC Conduction , frequency: 50 Hz,

Geometry model class: Axisymmetric

Problem database file names:

- Problem: *resistive_limiter.pbm*
- Geometry: *Resistive_limiter.mod*
- Material Data: *Resistive_limiter.dec*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

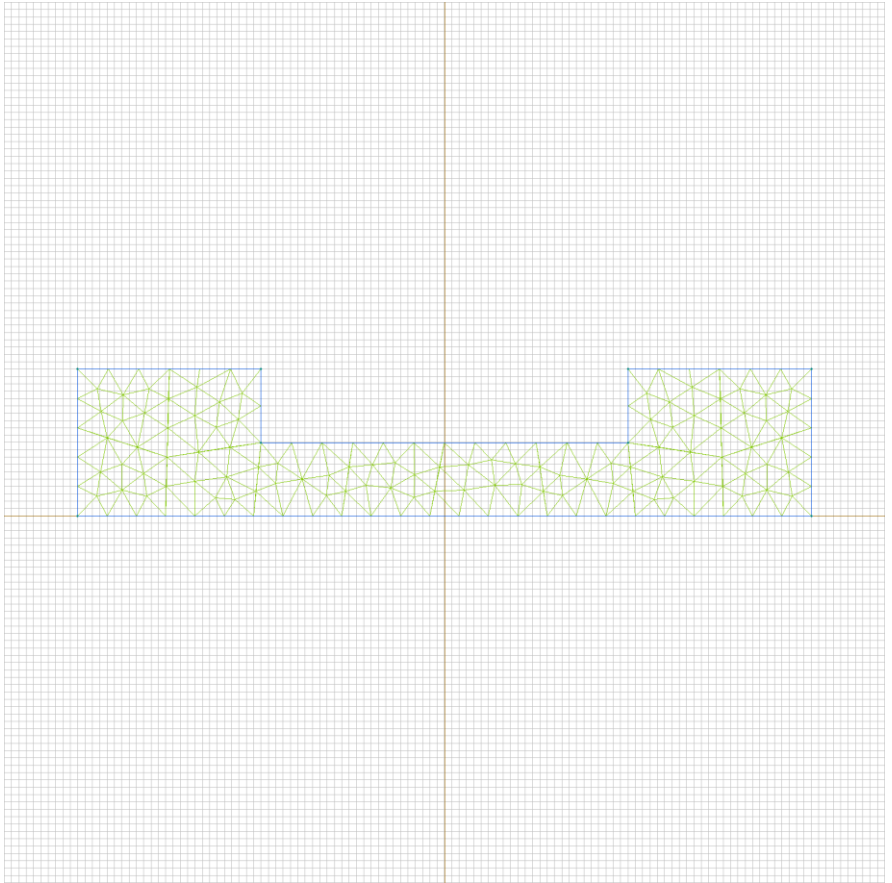


Table 1. Geometry model statistics

	With Label	Total
Blocks	1	1
Edges	3	8
Vertices	0	8

Number of nodes: 155.

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:

- [bscco](#)
-

Edges:

- [zero_Jn](#)
- [v_minus](#)
- [v_plus](#)
-

Vertices:

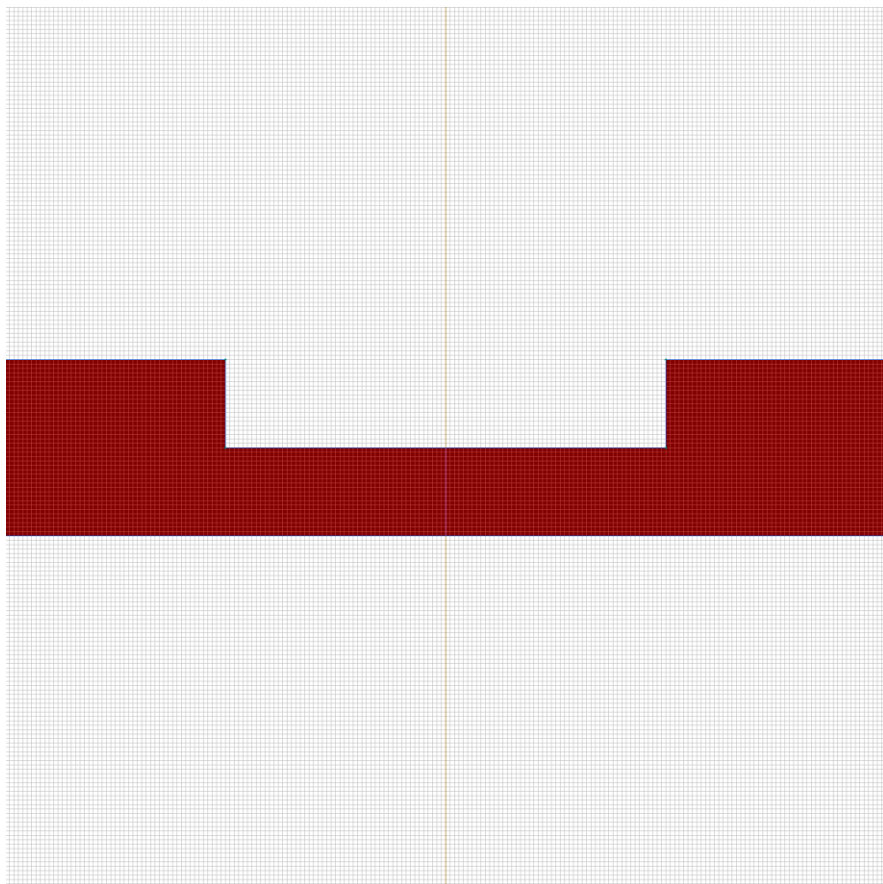
Detailed information about each label is listed below.

Labelled objects: block "bscco"

There are (1) objects with this label

Relative electric permittivity $\epsilon_{x=1}$, $\epsilon_{y=1}$

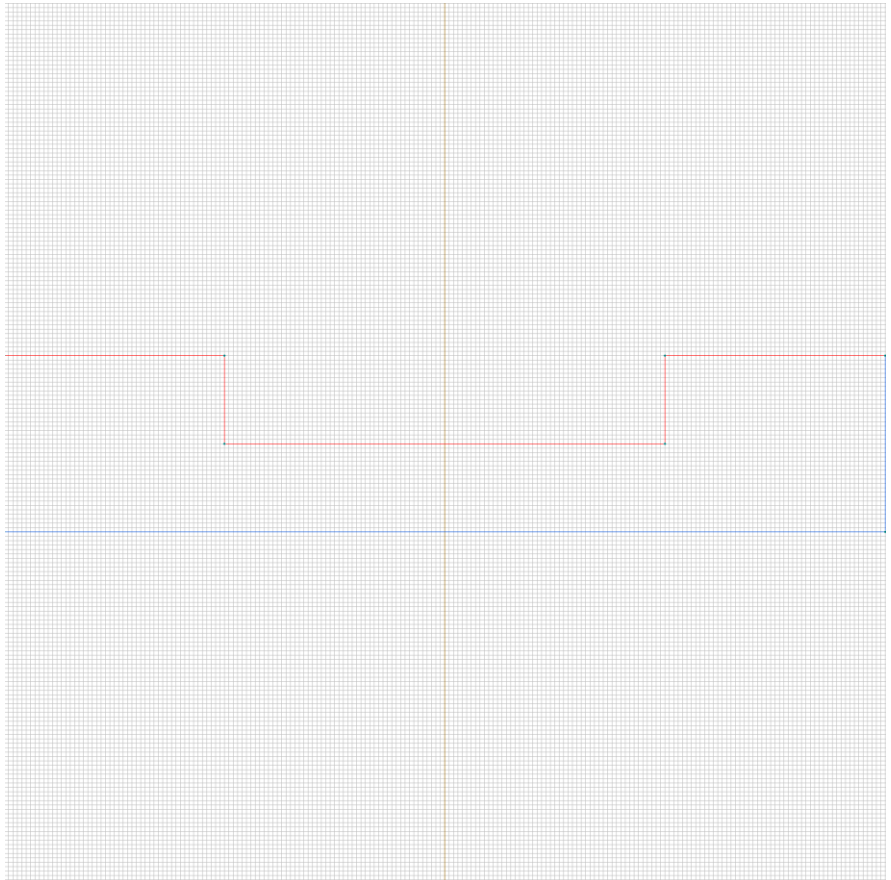
Electrical conductivity $\sigma_{x=100}$ [S/m], $\sigma_{y=100}$ [S/m]



Labelled objects: edge "zero_Jn"

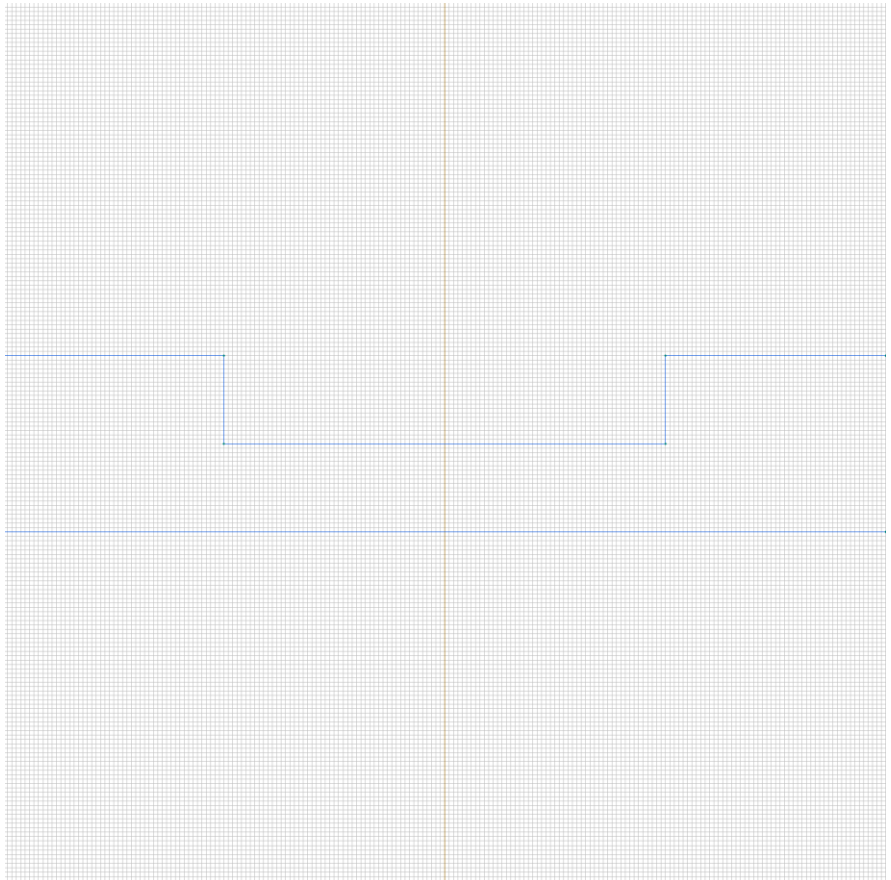
There are (5) objects with this label

Normal current density: $j_n=0$ [A/m²], phase 0 [deg]



Labelled objects: edge "v_minus"
There are (1) objects with this label

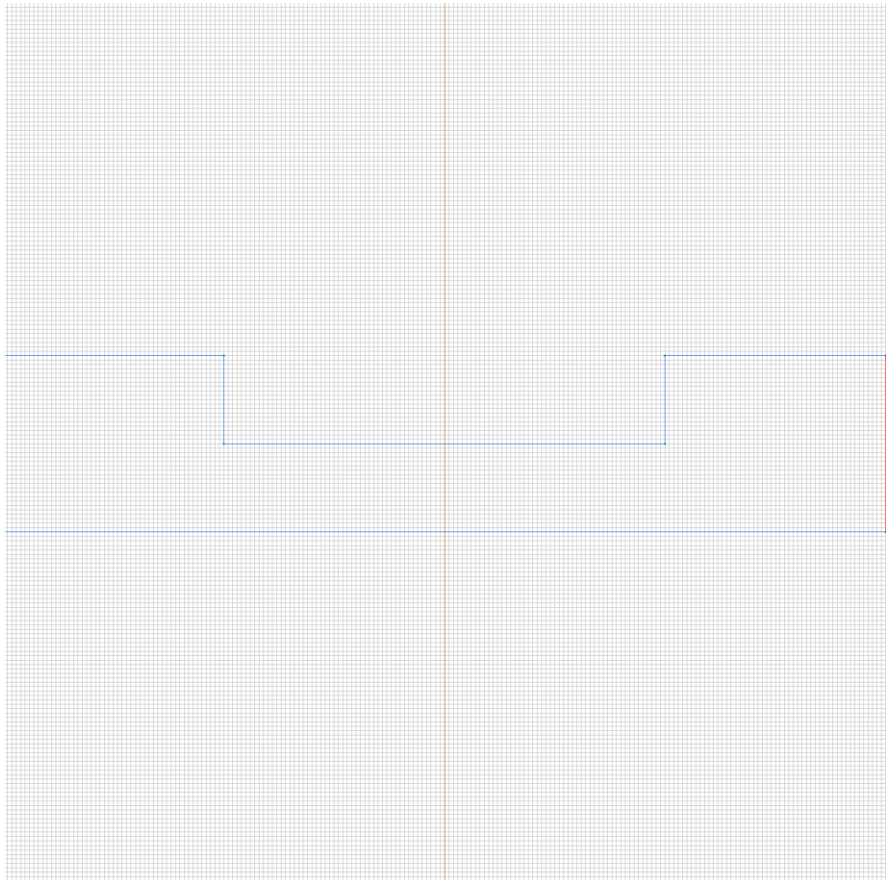
Voltage: $U=0$ [V], phase 0 [deg]



Labelled objects: edge "v_plus"

There are (1) objects with this label

Voltage: $U=1$ [V], phase 0 [deg]



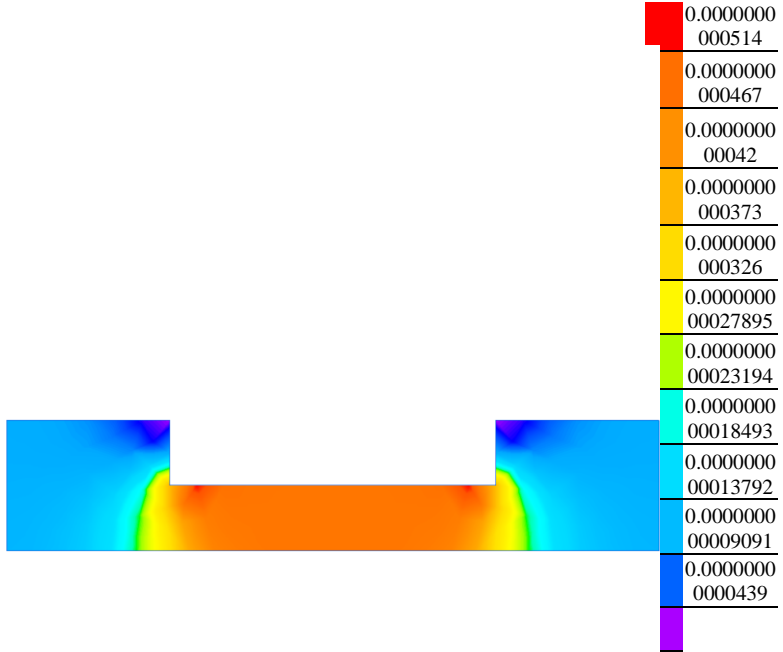
Results

Field lines



Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data