Problem info

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

- Problem: *thin_film_resistance.pbm*
- Geometry: *Thin_film_resistance.mod*
- Material Data: *Thin_film_resistance.dcf*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

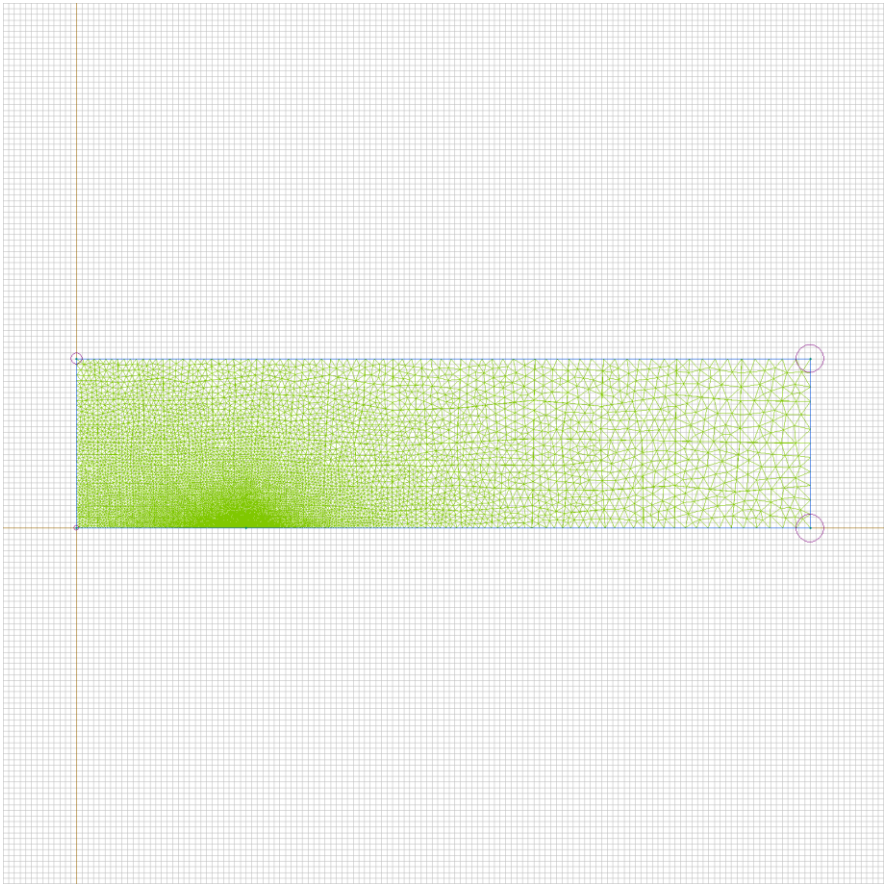


Table 1. Geometry model statistics

	With Label	Total
Blocks	1	1
Edges	2	5
Vertices	0	5

Number of nodes: 8912.

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)

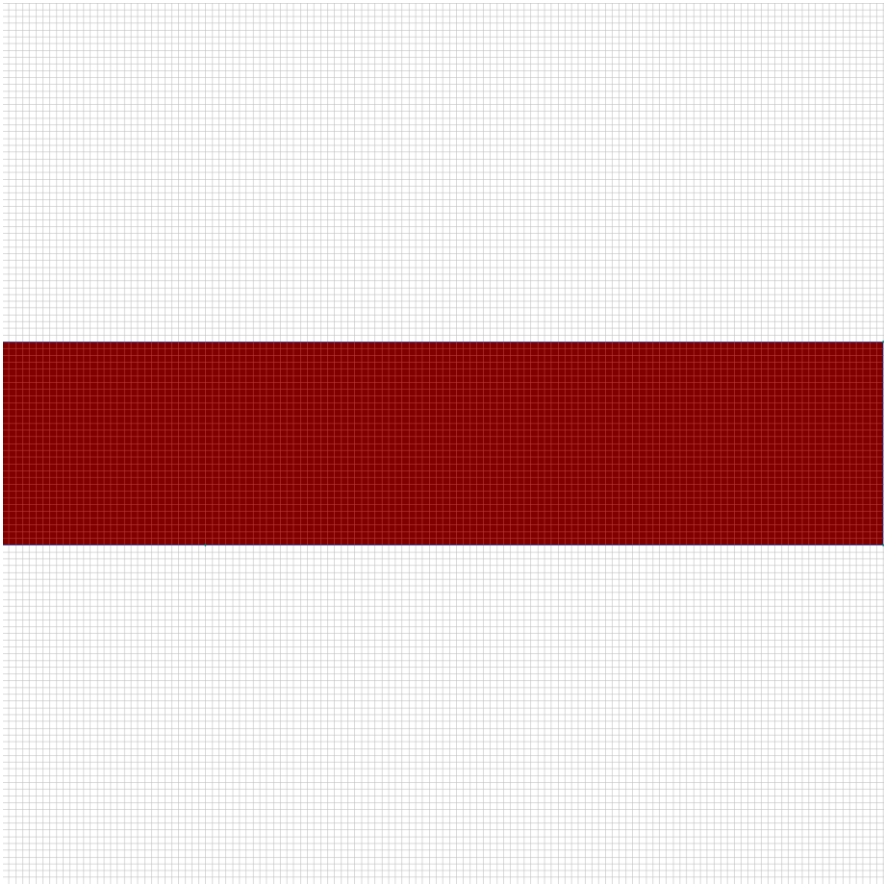
Blocks:	Edges:	Vertices:
• film •	• U- • U+ •	

Detailed information about each label is listed below.

Labelled objects: block "film"

There are (1) objects with this label

Electrical conductivity: sigma_x=10000000 S/m, sigma_y=10000000 S/m
Reference temperature: T=-273.15 K



Labelled objects: edge "U-"

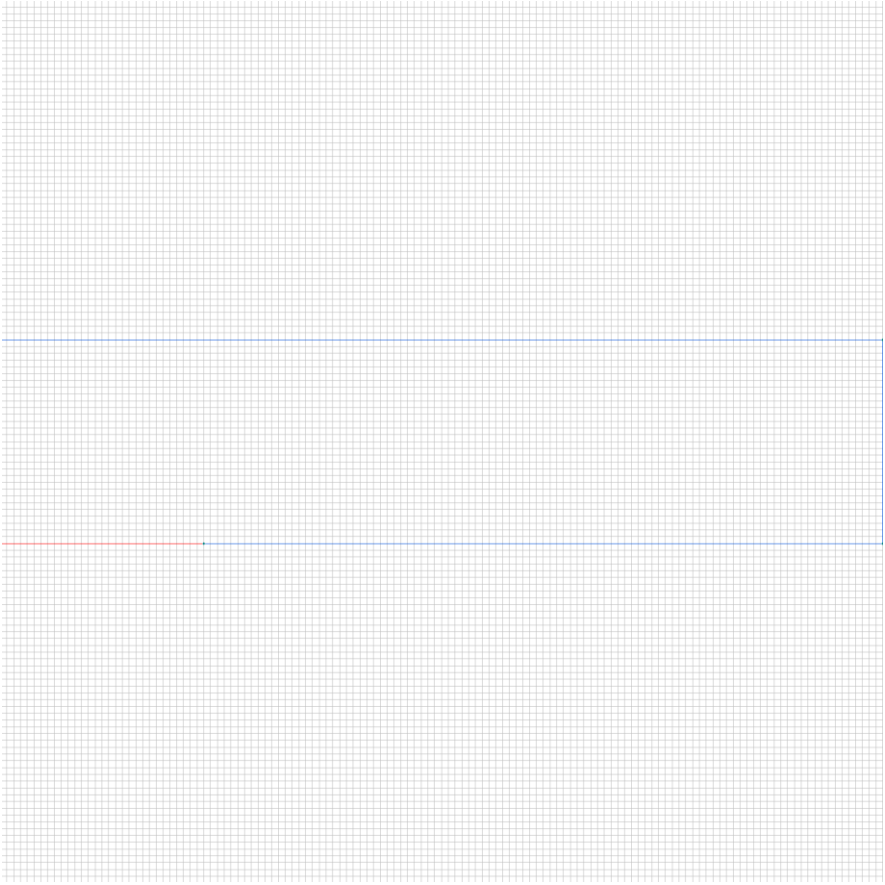
There are (1) objects with this label

Voltage: U=-0.01 V

Labelled objects: edge "U+"

There are (1) objects with this label

Voltage: U=0.01 V

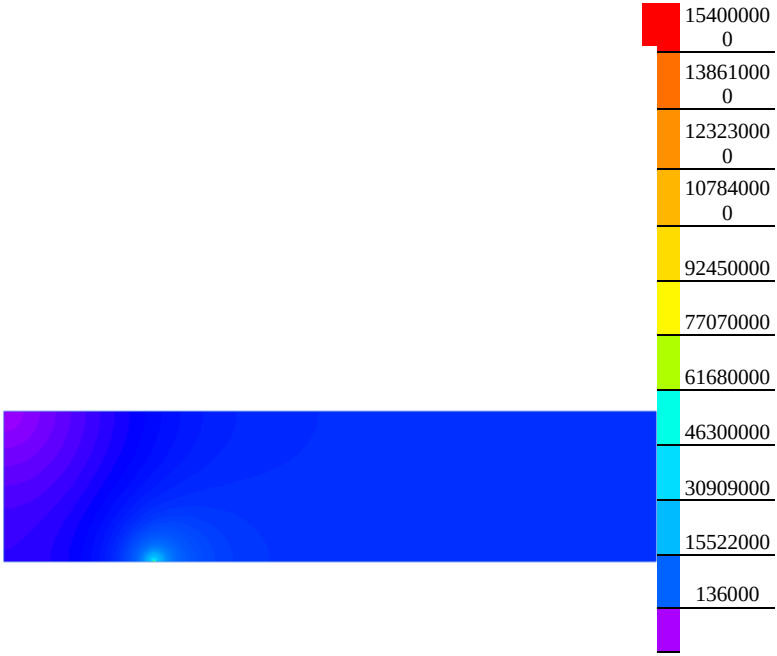


Results

Field lines

Results

Color map of Current density |j| [A/m2]



Nonlinear dependencies

No non-linear dependencies are used in this problem data