Problem info

Problem type: Transient Magnetics (integration time: 9.99999993922529E-09 s.)
Geometry model class: Plane-Parallel
Problem database file names:

- Problem: *circuit.pbm*
- Geometry: *Circuit.mod*
- Material Data: *Circuit.dms*
- Material Data 2 (library): *none*
- Electric circuit: *circuit.qcr*

Results taken from other problems:

- *none*

Geometry model

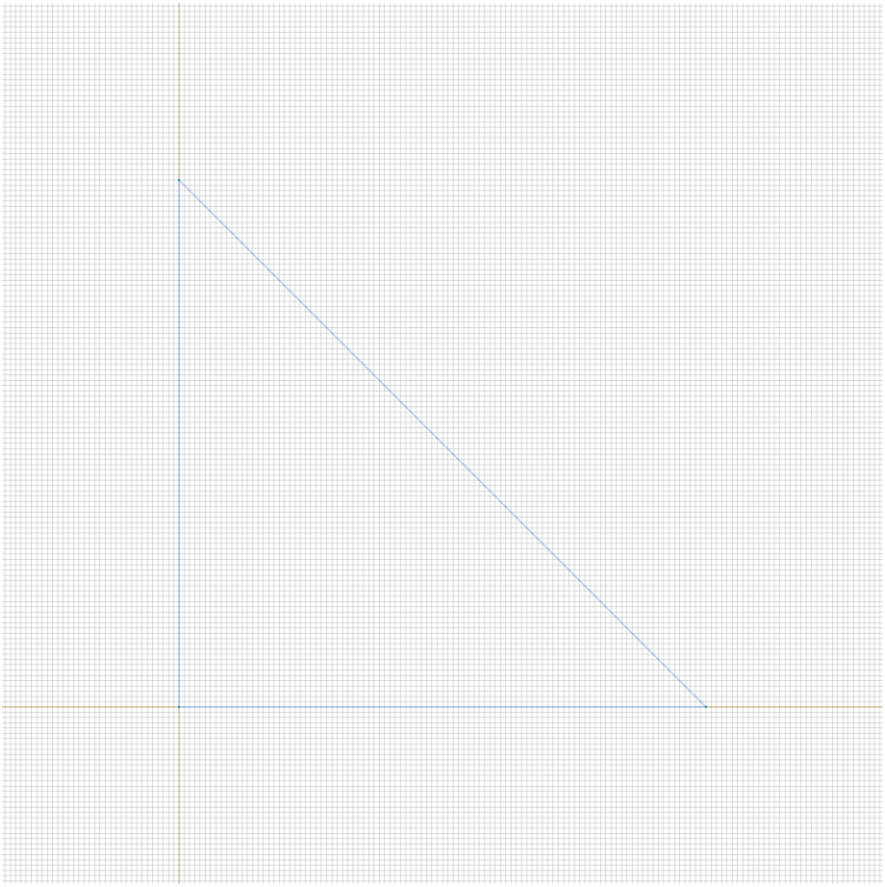


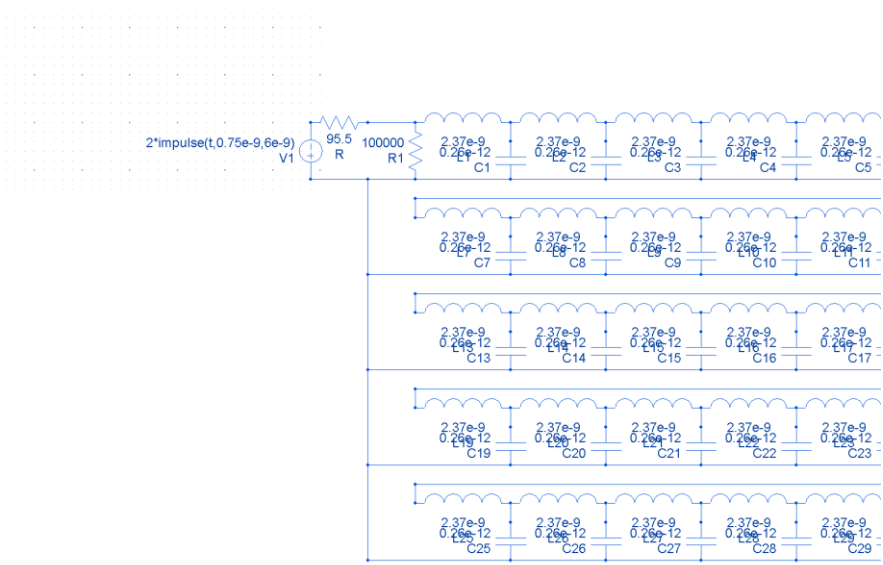
Table 1. Geometry model statistics

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

Number of nodes: 3.

Electric circuit

Coupled electric circuit



Circuit elements:

Inductor L1=0.00000000237 [H]
Voltage source V1=2*impulse(t,0.75e-9,6e-9) [V]
Resistor R=95.5 [Ohm]
Resistor Load=50 [Ohm]
Resistor R1=100000 [Ohm]
Capacitor C1=0.00000000000026 [F]

Inductor L2=0.00000000237 [H]
Capacitor C2=0.00000000000026 [F]
Inductor L3=0.00000000237 [H]
Capacitor C3=0.00000000000026 [F]
Inductor L4=0.00000000237 [H]
Capacitor C4=0.00000000000026 [F]
Inductor L5=0.00000000237 [H]
Capacitor C5=0.00000000000026 [F]
Inductor L6=0.00000000237 [H]
Capacitor C6=0.00000000000026 [F]
Inductor L7=0.00000000237 [H]
Capacitor C7=0.00000000000026 [F]
Inductor L8=0.00000000237 [H]
Capacitor C8=0.00000000000026 [F]
Inductor L9=0.00000000237 [H]
Capacitor C9=0.00000000000026 [F]
Inductor L10=0.00000000237 [H]
Capacitor C10=0.00000000000026 [F]
Inductor L11=0.00000000237 [H]
Capacitor C11=0.00000000000026 [F]
Inductor L12=0.00000000237 [H]
Capacitor C12=0.00000000000026 [F]
Inductor L13=0.00000000237 [H]
Capacitor C13=0.00000000000026 [F]
Inductor L14=0.00000000237 [H]
Capacitor C14=0.00000000000026 [F]
Inductor L15=0.00000000237 [H]
Capacitor C15=0.00000000000026 [F]
Inductor L16=0.00000000237 [H]
Capacitor C16=0.00000000000026 [F]
Inductor L17=0.00000000237 [H]

Capacitor C17=0.00000000000026 [F]
Inductor L18=0.00000000237 [H]
Capacitor C18=0.00000000000026 [F]
Inductor L19=0.00000000237 [H]
Capacitor C19=0.00000000000026 [F]
Inductor L20=0.00000000237 [H]
Capacitor C20=0.00000000000026 [F]
Inductor L21=0.00000000237 [H]
Capacitor C21=0.00000000000026 [F]
Inductor L22=0.00000000237 [H]
Capacitor C22=0.00000000000026 [F]
Inductor L23=0.00000000237 [H]
Capacitor C23=0.00000000000026 [F]
Inductor L24=0.00000000237 [H]
Capacitor C24=0.00000000000026 [F]
Inductor L25=0.00000000237 [H]
Capacitor C25=0.00000000000026 [F]
Inductor L26=0.00000000237 [H]
Capacitor C26=0.00000000000026 [F]
Inductor L27=0.00000000237 [H]
Capacitor C27=0.00000000000026 [F]
Inductor L28=0.00000000237 [H]
Capacitor C28=0.00000000000026 [F]
Inductor L29=0.00000000237 [H]
Capacitor C29=0.00000000000026 [F]
Inductor L30=0.00000000237 [H]
Capacitor C30=0.00000000000026 [F]

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)

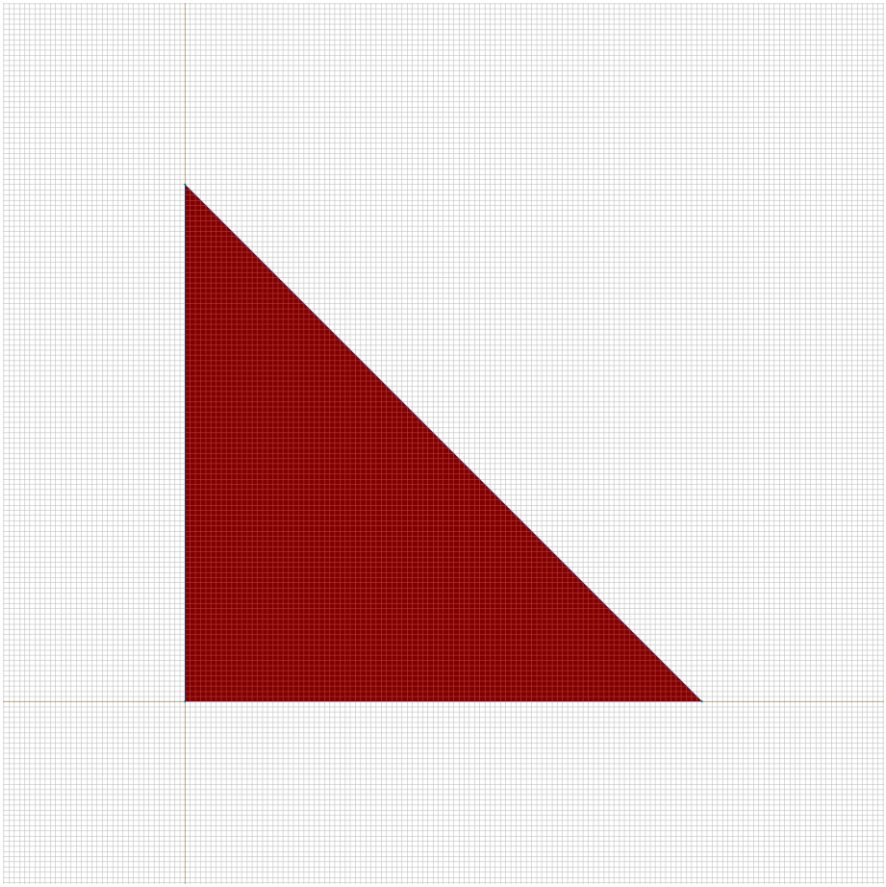
Blocks:	Edges:	Vertices:
• a1 •	• a0 •	

Detailed information about each label is listed below.

Labelled objects: block "a1"

There are (1) objects with this label

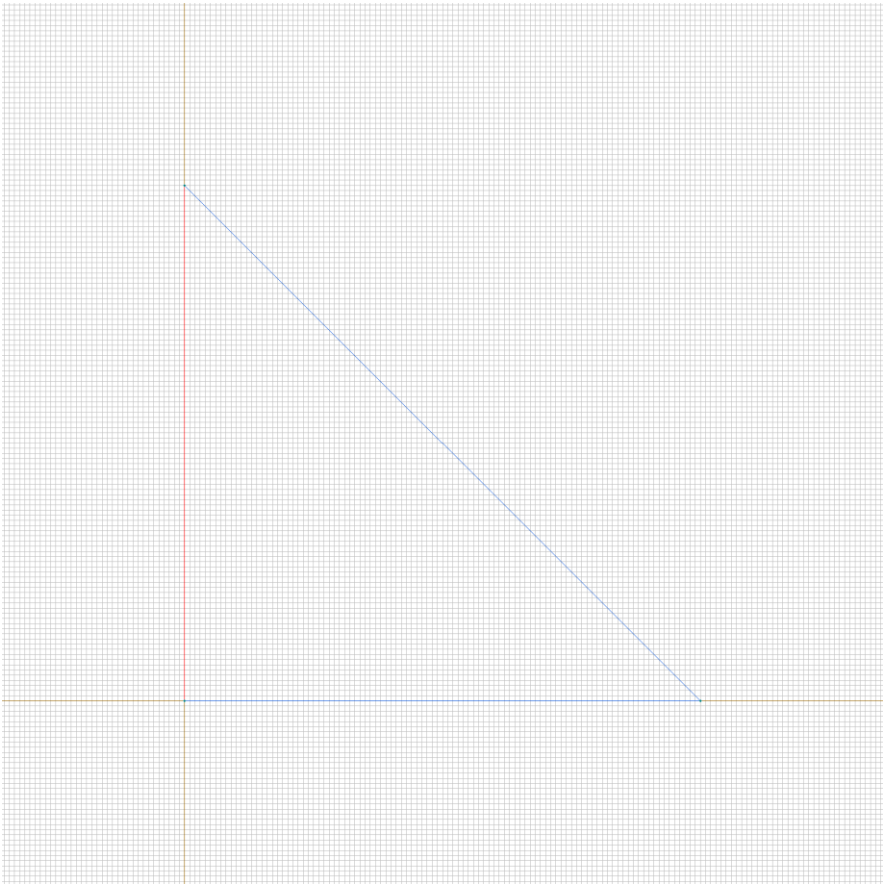
Relative magnetic permeability: mu_x=1, mu_y=1
Current density: j=0 [A/m2]
Conductor's connection: in parallel



Labelled objects: edge "a0"

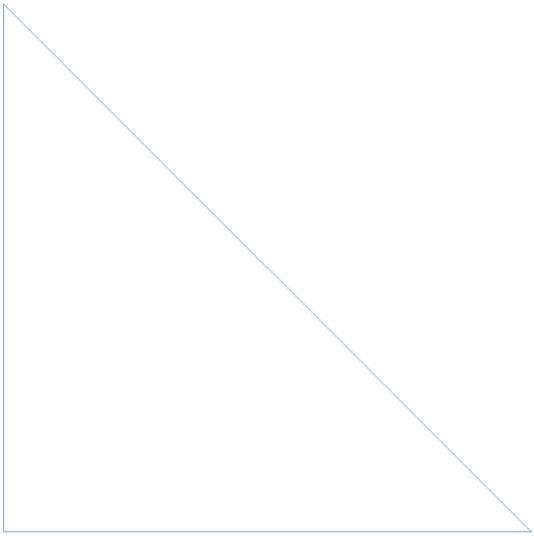
There are (1) objects with this label

Magnetic potential: A=0 [Wb/m]



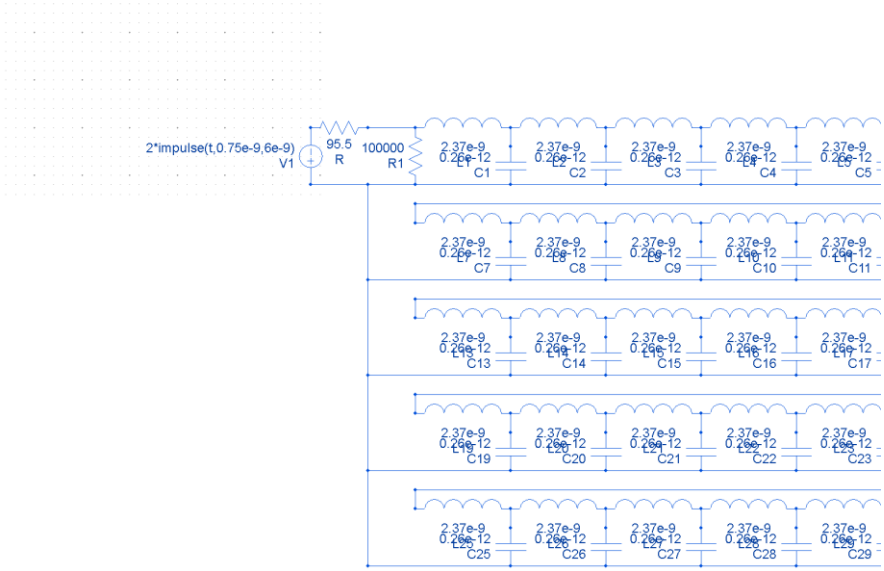
Results

Field lines



Results

Electric circuit currents



Circuit elements:

L1. I=0.0000030662 [A]

V1. I=0.0000030633 [A]

R. I=0.0000030633 [A]

Load. I=0.0000018916 [A]

R1. I=0.0000000029254 [A]

C1. I=0.00000024878 [A]

L2. I=0.0000028174 [A]

C2. I=0.00000021683 [A]

L3. I=0.0000026006 [A]

C3. I=0.00000018859 [A]

L4. I=0.000002412 [A]

C4. I=0.00000016365 [A]

L5. I=0.0000022484 [A]

C5. I=0.00000014166 [A]

L6. I=0.0000021067 [A]

C6. I=0.00000012226 [A]

L7. I=0.0000019845 [A]

C7. I=0.00000010515 [A]

L8. I=0.0000018793 [A]

C8. I=0.00000009003 [A]

L9. I=0.0000017893 [A]

C9. I=0.00000007662 [A]

L10. I=0.0000017127 [A]

C10. I=0.0000000647 [A]

L11. I=0.000001648 [A]

C11. I=0.00000005404 [A]

L12. I=0.0000015939 [A]

C12. I=0.00000004443 [A]

L13. I=0.0000015495 [A]

C13. I=0.00000003571 [A]

L14. I=0.0000015138 [A]

C14. I=0.000000027715 [A]

L15. I=0.0000014861 [A]

C15. I=0.000000020312 [A]

L16. I=0.0000014658 [A]

C16. I=0.000000013381 [A]

L17. I=0.0000014524 [A]

C17. I=0.000000006821 [A]

L18. I=0.0000014456 [A]

C18. I=0.0000000005441 [A]

L19. I=0.000001445 [A]

C19. I=0.000000005521 [A]

L20. I=0.0000014505 [A]

C20. I=0.000000011434 [A]

L21. I=0.000001462 [A]

C21. I=0.000000017244 [A]

L22. I=0.0000014792 [A]

C22. I=0.000000022987 [A]

L23. I=0.0000015022 [A]

C23. I=0.000000028692 [A]

L24. I=0.0000015309 [A]

C24. I=0.00000003438 [A]

L25. I=0.0000015653 [A]

C25. I=0.00000004007 [A]

L26. I=0.0000016053 [A]

C26. I=0.00000004577 [A]

L27. I=0.0000016511 [A]

C27. I=0.00000005148 [A]

L28. I=0.0000017026 [A]

C28. I=0.00000005722 [A]

L29. I=0.0000017598 [A]

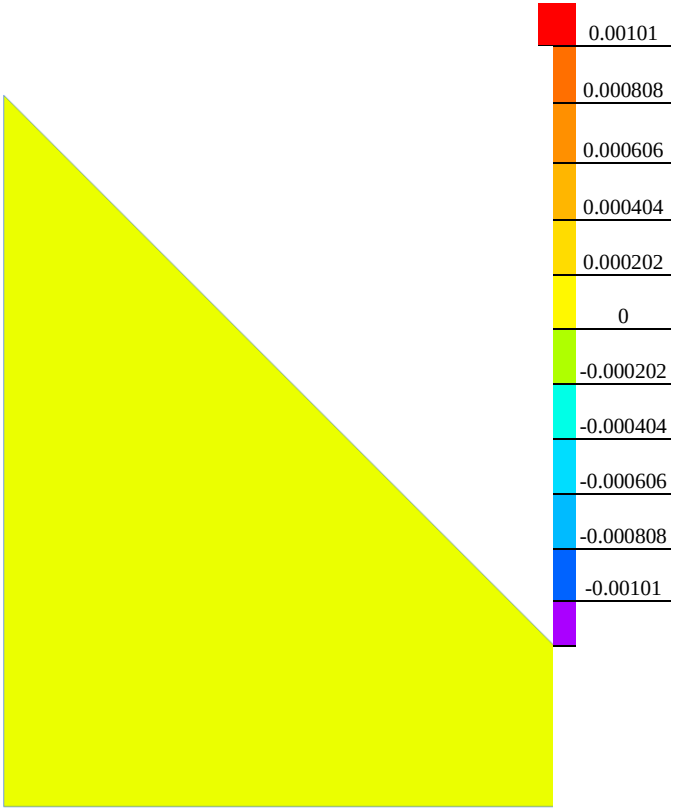
C29. I=0.00000006298 [A]

L30. I=0.0000018228 [A]

C30. I=0.00000006877 [A]

Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data