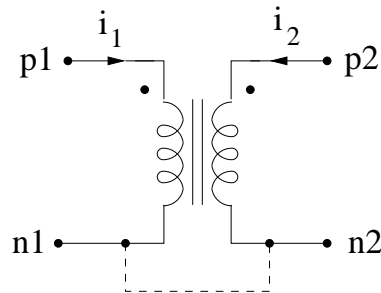


rt_xfmr_1.ece



Attributes

```
mainnodes: p1 n1 p2 n2
rparms:
+ l1=1m
+ l2=1m
+ k=1
+ tstep=50u
```

Description

rt_xfmr_1.ece is a basic transformer without coil resistances and leakage inductances. The parameters have the following meaning:

l1: self inductance of the first coil.

l2: self inductance of the second coil.

k: coupling coefficient.

tstep: time step used in the circuit file.

The dashed connection between the two sides (see figure) should be made *externally* in the circuit file if there is otherwise no connection between the two sides. Alternatively, the nodes n1 and n2 could be given the same node name, which will automatically force such a connection.

This is required because the circuit as a whole can have only one reference node. If the two sides are completely isolated, a part of the circuit will remain floating, leading to a singular matrix.

The dashed wire does not change the circuit behaviour since it does not carry a current, there being no return path.