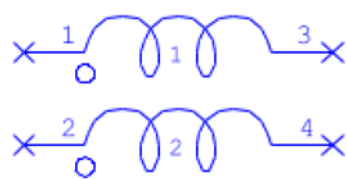


Mutually Coupled Coils 2 Inductors (Closed Form): MUC2

Symbol



Parameters

Name	Description	Unit Type	Default
ID	Element ID	Text	M1
L1	Self-inductance of coil 1	Inductance	1 nH
R1	Resistance of coil 1	Resistance	0 ohm
L2	Self-inductance of coil 2	Inductance	1 nH
R2	Resistance of coil 2	Resistance	0 ohm
K1_2	Coupling coefficient between coils 1 and 2		0

Implementation Details

$V_{ci}$  is the voltage across coil  $i$ ,  $i=1, \dots, N$ :

$$V_{ci} = (R_i + j\omega L_i) \cdot I_i + \sum_{j=1}^N j\omega M_{ij} I_j$$

$$M_{ij} = K_{ij} \cdot \sqrt{L_i \cdot L_j}$$

$$L_i > 0$$

$$R_i > 0$$

$$-1 < K_{ij} < 1$$

## Layout

This element does not have an assigned layout cell. You can assign artwork cells to any element. See [“Assigning Artwork Cells to Layout of Schematic Elements”](#) for details.

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