Inductor

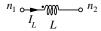


Figure 1: L — Inductor Element.

SPICE Form:

Lname  $n_1$   $n_2$  ModelName Inductor Value [IC= $I_L$ ]

 $n_1$  is the positive element node  $n_2$  is the negative element node

ModelName is the optional model name

InductorValue is the inductance. (Units: Henries; Required)

is the optional initial condition specification. Using  $IC=I_L$  is used with the UIC option on the .TRAN line when a transient analysis is desired with initial current  $I_L$  through the inductor rather than the quiescent operating point. Specification of the transient initial condition using the .IC is preferred and is more convenient.

Model Parameters:

Name	Description	Units	Default
L	Inductor Value	henries	-
intres	Internal resistance value	ohms	-
timed	Flag: if true then calculate in the time domain	-	-

Example:

L2 20 52 LSERIES 10U IC=16.9mA

Notes:

The actual element is the ind TRANSIM element. See TRANSIM element ind for full documentation.

Credits:

Name Affiliation Date Logo

Carlos E. Christofferson NC State University Sept 2000 NC STATE UNIVERSITY