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AC Current Source: ACCS

Symbol

Summary

This signal source is superseded and should be replaced with one of the following: AC_V for voltage sources, AC_I for current sources, or PORT_SRC for ports, with the Signal parameter set to this signal type.

The period for tone 1 sources is the inverse of the specified simulation frequency; see "Frequency Sweep Control" for details.

Parameters

Name	Description	Unit Type	Default
ID	Current source ID	Text	V1
Mag	AC current magnitude	Current	1 mA
Ang	AC current angle	Angle	0 Deg
Offset	Waveform offset (does not affect DC)	Current	0
DCVal	DC Value (Used for DC analysis)	Current	0

Implementation Details

Produces an alternating current with a frequency defined by the project frequency set up for the schematic containing this element.

NOTE: AWR® simulators add some series resistance to this element during simulation. This may affect results if injecting current into a large resistance. To change the value of the resistance, choose **Options > Default Circuit Options** to display the Circuit Options dialog box, then click the **AWR Sim** tab and under **Convergence Aids** specify the **Series source resistance**.

NOTE: If a sinusoidal nonlinear source like this one has the parameter Ang=0 and is ideally terminated, then a nonlinear measurement (for example, Pcomp or Vcomp) made at the fundamental output of that source will have an angle of -90deg. This discrepancy is consistent with the definition of the sine wave sources (as in SPICE), and the Fourier based harmonic component measurements. To avoid confusion, always measure or calculate the gain, and plot its angle.

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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