

Amplitude Modulated Voltage Source

vam

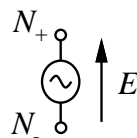


Figure 1: Independent Voltage Source Element.

Form: `vam:<instance name> n1 n2 <parameter list>`

n₁ is the positive element node,

n₂ is the negative element node.

Parameters:

Parameter	Type	Default value	Required?
oc: Offset Constant (Dimensionless)	DOUBLE	0	no
sa: Signal amplitude (V)	DOUBLE	0	no
fcarrier: Carrier frequency (Hz)	DOUBLE	0	no
fmod: modulation frequency(Hz)	DOUBLE	0	no
td: Time Delay (seconds)	DOUBLE	0	no

Example:

`vam:vsignal 8 0 oc=1 sa=10 fcarrier=1K fmod=100 td=1m`

`vam:v2 8 0 oc=1 sa=10 fcarrier=100 fmod=1K td=1m`

Description:

The waveform for this source is

$$v = saoc + \sin[2.\pi.fmod.(t - td)]\sin[2.\pi.fcarrier.(t - td)] \quad (1)$$

Notes:

This is the V element in the SPICE compatible netlist.

Version:

2002.05.01

Credits:

Name

Affiliation

Date

Links

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May 2002

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