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Measurement Probe: M_PROBE

Symbol

Summary

M_PROBE identifies an element terminal for voltage and current measurements of all kinds. You must place it on an element terminal-- it does not measure voltage in the middle of a wire. The advantage of using M_PROBE is that after simulation, you can drag it around a schematic to display the same measurement at different element terminals, without editing a measurement or requiring a new simulation. To move the M_PROBE without dragging, right-click it and choose **Dynamic Probe**, then click any node or terminal to move it there, or double-click on a SUBCKT block to open the lower-level circuit and click to place the probe there. Press the **Esc** key to exit dynamic mode.

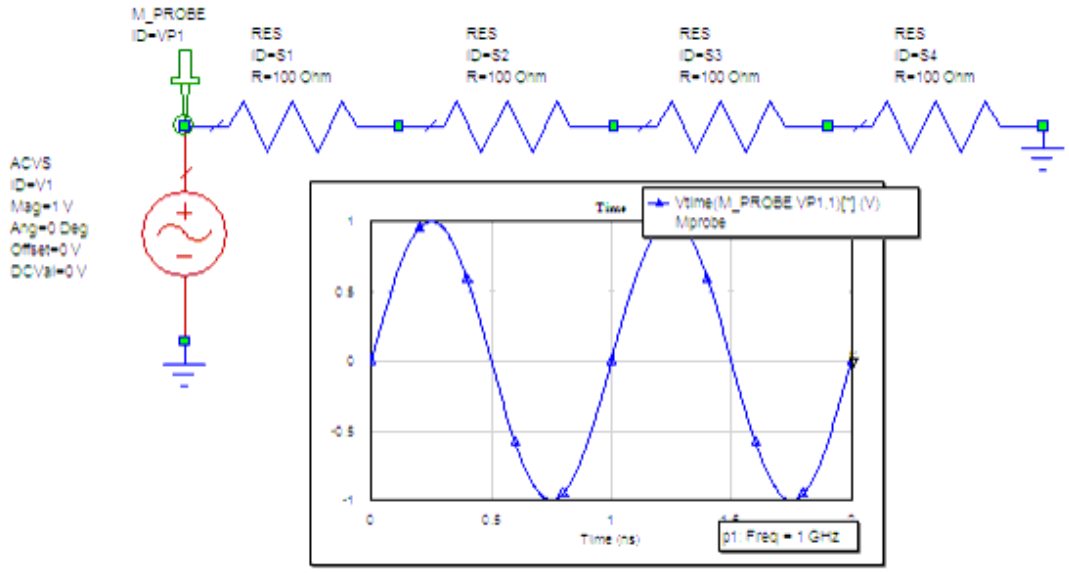
Some measurements such as VTimeD can use two M_PROBEs. To make both of the probes dynamic at the same time, select one probe, **Shift**-click the next one, right-click and choose **Dynamic Probe**. The first probe moves to the position of the mouse click and the second probe moves to the same relative location. If the second probe is not placed where you want it, **Shift**-click at the desired location.

Parameters

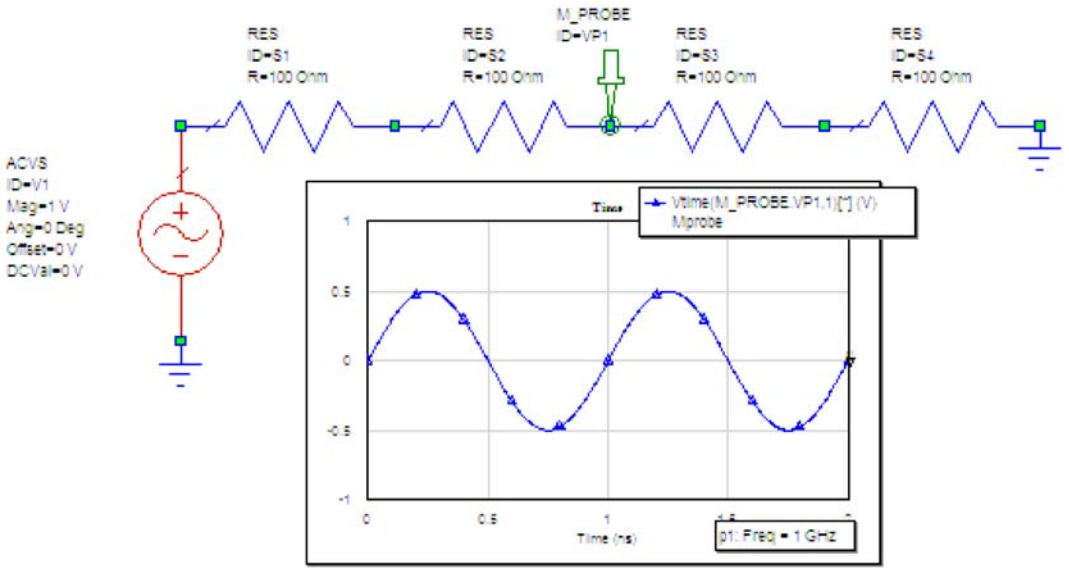
Name	Description	Unit Type	Default
ID	Measurement Probe name	Text	VP1

Implementation Details

In the following schematic, the M_PROBE is at the input voltage source.



Click and drag the M_PROBE to move it to a new location to update graphs.



In current measurements, current flowing into the selected element terminal is positive, unless the element is a voltage or current source.

If you set transient simulation options to save results only at meters, the M_PROBE is NOT included in this list since you can change its location without requiring a new simulation.

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.

Recommendations for Use

In circuit schematics, do not use "pin-to-pin" connections at element terminals where current is measured. In the previous example, you should space the elements apart and connect them by wires

for current measurements. The M_PROBE current measurement are ambiguous if the desired element terminal is at the same location as one or more others.

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