Status of Instrumentation Models

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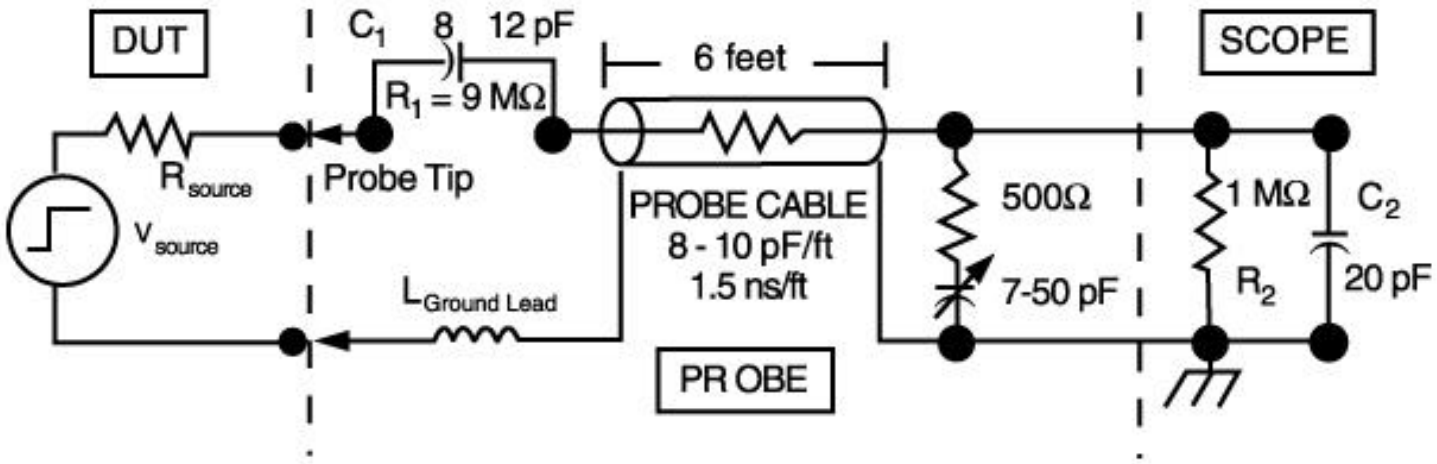
Status

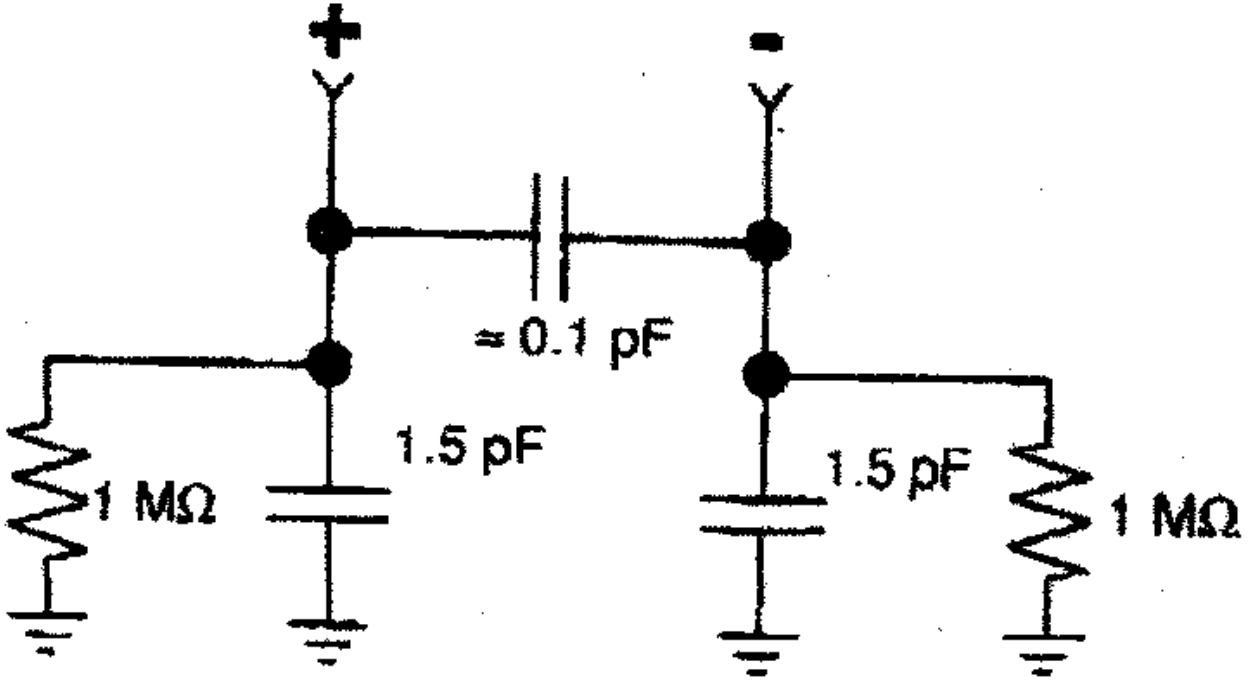
- Tektronix and Agilent don’t have the SPICE model for their probes.
- Due to propriety, Agilent only provides two models
- The contact channel to Tektronix is lost and has not restored.
- The current contacts are
  Agilent:Ted Ayres

Simple Approach



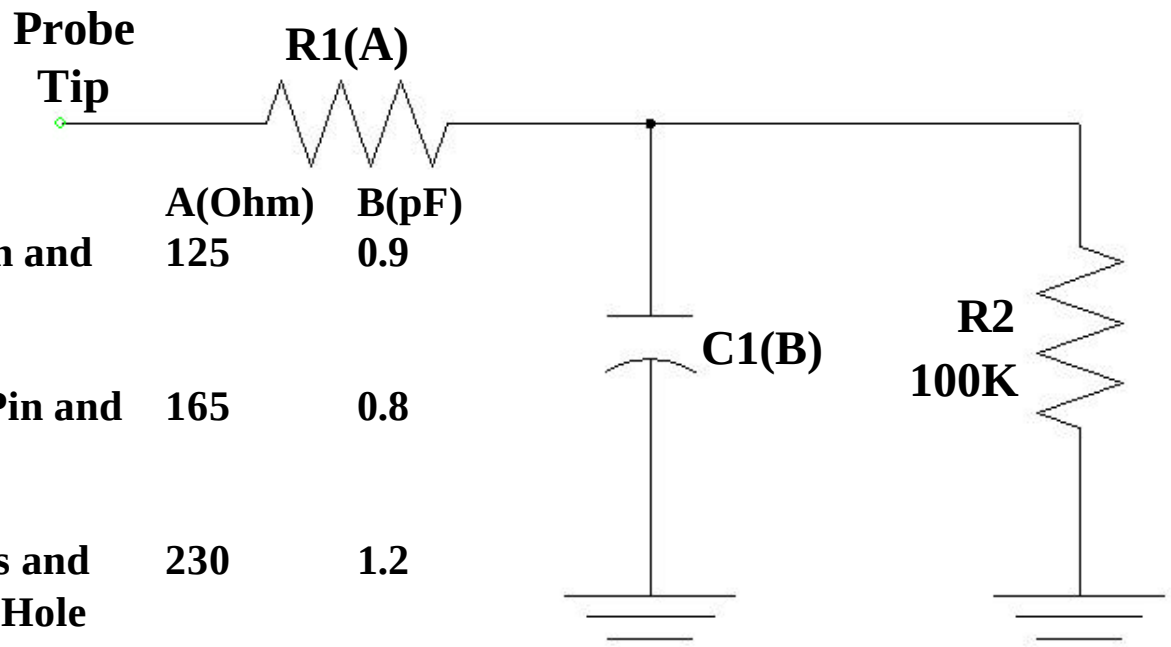
R_1 and C_1 are from the probe spec.
L_{lead} is calculated based on the lead used.

Agilent N1025A Active Differential Probe



*** Provided by Agilent**

Agilent 1156A & 1158A Active Probe



Configuration	A(Ohm)	B(pF)
110Ohm Passive Signal Pin and Solderable Ground Socket	125	0.9
130Ohm Resistive Signal Pin and Ground Blade	165	0.8
5cm Resistive Signal Leads and Solderable SMT/Through-Hole Ground Pin	230	1.2
Socket-End 10cm Resistive Signal Lead and Solderable SMT or Through-Hole Ground Pin	275	1.8

*From 1156A User's Guide

Summary of Agilent Active Differential Probe

Model	Frequency Range (Hz)	Input Resistance (each side to ground;Ohm)	Input Capacitance (each side to ground;pF)	Input Capacitance (between inputs;pF)
N1025A	1.5G	1M	<1.5	<0.85
1154A	500M	1M	6	3.1
1159A	1G	1M	<1.5	<0.85
1153A	200M	1M	7	

Summary of Agilent Active Probe

Model	Frequency Range (Hz)	Input Resistance (Ohm)	Input Capacitance (pF)
1156A	1.5G	100K	0.8
1152A	2.5G	100K	0.6
1158A	4G	100K	0.8
85024A	3G	1M	<0.7
1155A	750M	1M	2
1157A	2.5G	100K	0.8