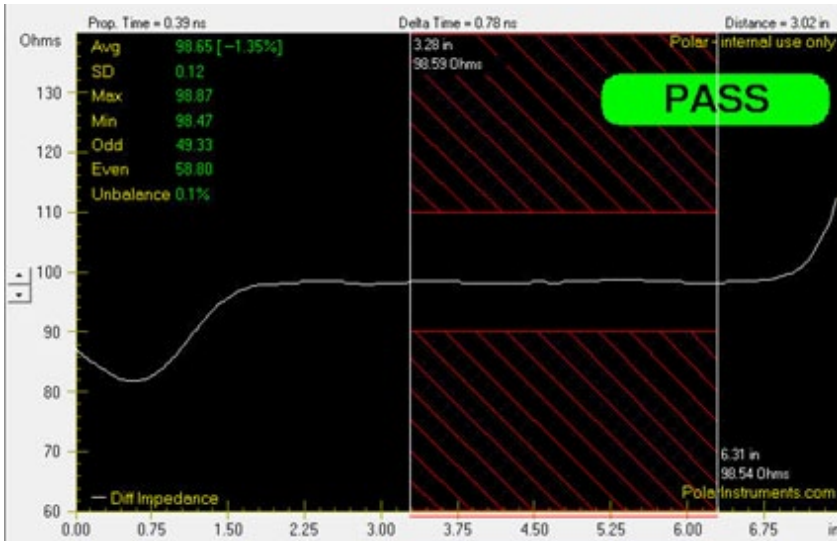
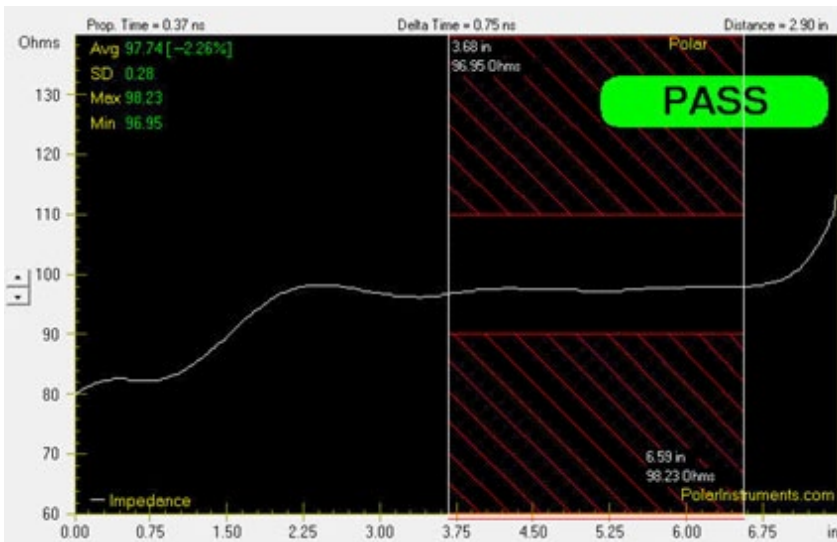


Sales Training Note Polar On-Board Probing



IPDS100 probe

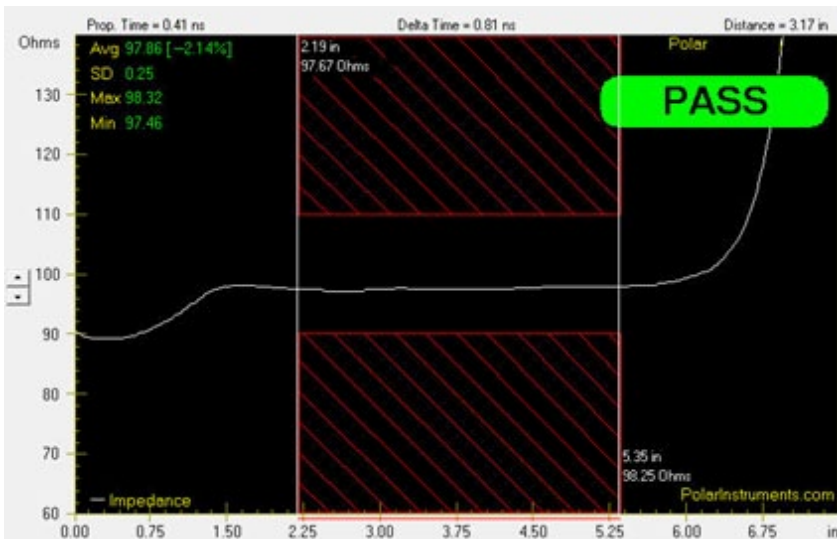
This is a picture of a Polar differential measurement using their standard 4 pin 100 ohm differential probe provided by Polar in their AP8510 application note (web address <https://www.polarinstruments.com/support/cits/AP8510.html>). This is the standard probe for measuring coupons for Polar. Note that the discontinuity at the pin/board interface obscures the measurement for about 2 inches at the beginning of the trace, and about 1 inch as the measurement goes to infinity at the end. This shows that no measurement will be accurate unless the trace length is greater than 3 inches. Under 3 inches, and the discontinuities at the beginning and end of the measurement will merge into an incorrect value.



GDPS100 fixed pitch probe

This is a Polar trace of the same 100 ohm differential trace using the new fixed pitch on-board groundless differential probe. Note that the discontinuity at the pin/board interface is now up to at least 3 inches. With the end of trace discontinuity of 1 inch, the shortest trace measurable is up to 5 inches.

Note also that this reading is 1 ohm different than the standard 4 pin probe.



GDPS100 variable pitch probe

This is a Polar trace of the same 100 ohm differential trace using a variable pitch probe. Again, the shortest trace that can be measured with these discontinuities is at least 3 inches long.

Note also that this reading is 1 ohm different than the standard 4 pin probe