CERTIFICATE OF CALIBRATION

Calibrated for:	Advance Devices, Inc.	*Certificate No:*	16468
Serial Number:	21155	*Software Version:*	R.1.04
Temperature:	23±2C	*Relative Humidity:*	50+20%
Model:	ST5S	*Procedure Used:*	4/6RES3.07
Certificate Date:	5/31/2015 9:10:23 PM		

This certified that above product was calibrated using applicable procedure.

As received condition: Factory tested

As shipped condition: At the completion of calibration this product meets published specification

Special Requirements: Re-certification of calibration will be performed upon request

Calibration Equipment Used: Smart Tweezers ST5S Calibration Module LVC139-CAL
(Certificate of calibration #136455 by Navair Technologies, Inc.)

Accuracy Specification

Parameter	Measurement Range	Basic Measurement Accuracy*
Resistance	100 Ω to 10 kΩ	Better than 0.2%
	0.1 Ω to 9.9 MΩ	Better than 0.7%
Capacitance	10 nF to 100 µF	Better than 0.5%
	100 pF to 1000 µF	Better than 2.0%
Inductance	1 µH to 1 H	Better than 0.5%
	1.0 µH to 999 mH	Better than 1.0%

Maximum measurement ranges

Resistance R:	0.05 Ω to 9.9 MΩ	Capacitance C:	0.5 pF to 999 µF
Inductance L:	0.5 µH to 999 mH	Quality factor Q:	0.001 to 1000
Dissipation factor D:	0.001 to 1000		

Maximum resolution

Resistance: 10 mΩ Capacitance: 0.1 pF Inductance: 0.1 µH

** with 4-wire bench calibration at optimum test frequencies, ranges, DUT value, without offset.*
2-wire measurements may introduce precision uncertainty up to 0.1%

Parameter	Measurement Range	Test frequency
Resistance	0.05 Ω to 9.9 MΩ	1 kHz
Capacitance	0.5 pF to 999 pF	10 kHz
	1000 pF to 1 µF	1 kHz
	> 1 µF	100 Hz
Inductance	0.5 µH to 999 µH	10 kHz
	1 mH to 99 mH	1 kHz
	> 100mH	100 Hz

Typical offset:

Resistance: 25 mΩ Capacitance: 0.35 pF Inductance: 0.1 µH

Offset value should be subtracted from measurement result for small values (R < 10Ω, C < 100 pF, L < 10 µH)