

## Technical Specifications Sheet

## Probe Model: **ACLA**

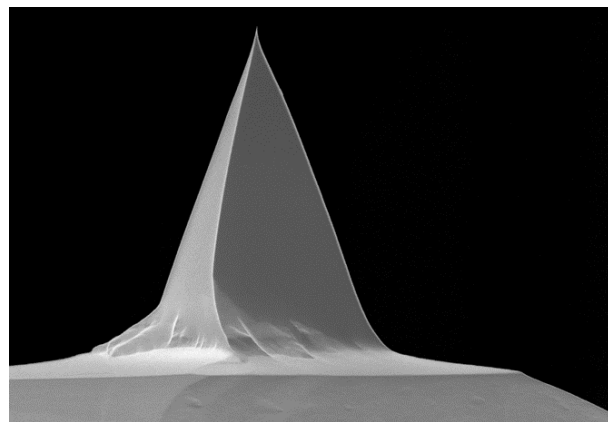
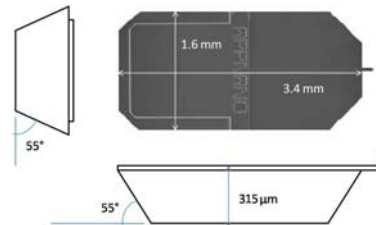
**APPNANO** probes are compatible with most commercially available SPMs. These probes are nanofabricated using highly doped single crystal silicon with unparalleled reproducibility, robustness and sharpness for consistent high resolution imaging capabilities.

**ACLA Probes** are designed for non-contact, tapping mode, intermittent contact, and/or close contact applications. The long ACLA cantilever allows larger laser clearance. The reflex side is coated with aluminum for increased laser signal quality.

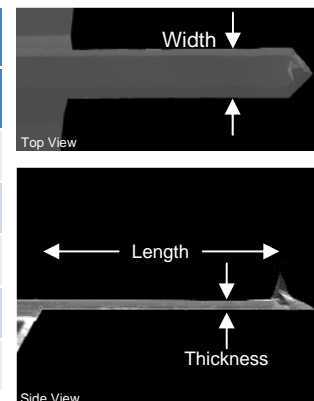
Handle Chip Specifications	
<b>L x W x T</b>	3.4 mm x 1.6 mm x 315 $\mu$ m
<b>Alignment Grooves</b>	YES

Tip Specifications	
<b>Shape</b>	Pyramidal
<b>Height (<math>\mu</math>m)</b>	14 - 16
<b>ROC (nm)</b>	6
<b>Coating</b>	None

Cantilever Specifications	
<b>Material</b>	Si
<b>Shape</b>	Rectangular
<b>Reflex Side Coating</b>	Al, 50 nm $\pm$ 5 nm



Parameter	Value		
	Nominal	Minimum	Maximum
<b>Spring Constant (N/m)</b>	58	36	90
<b>Frequency (kHz)</b>	190	160	225
<b>Length (<math>\mu</math>m)</b>	225	215	235
<b>Width (<math>\mu</math>m)</b>	40	35	45
<b>Thickness (<math>\mu</math>m)</b>	7.8	7.3	8.3



Ordering Information	
Part Number	Probes
ACLA-10	10
ACLA-20	20
ACLA-50	50
ACLA-200	200
ACLA-W	410 - 424

### NOTES:

1. The specification range is **guaranteed**. The values of spring constant and frequency are calculated using mathematical formulation
2. These probes feature **alignment grooves** compatible with all alignment chips available in the market.
3. Please contact our **distributor** in your area to **order** the probes.
4. For more technical information, please contact either our distributor in your area or e-mail us directly at [info@appnano.com](mailto:info@appnano.com)



[www.appnano.com](http://www.appnano.com)

Applied NanoStructures, Inc.  
415 Clyde Avenue, Suite 102, Mountain View, CA 94043, USA

Tel: 1 650 988 9880 Fax : 1 408 516 4917

E-mail : [info@appnano.com](mailto:info@appnano.com)