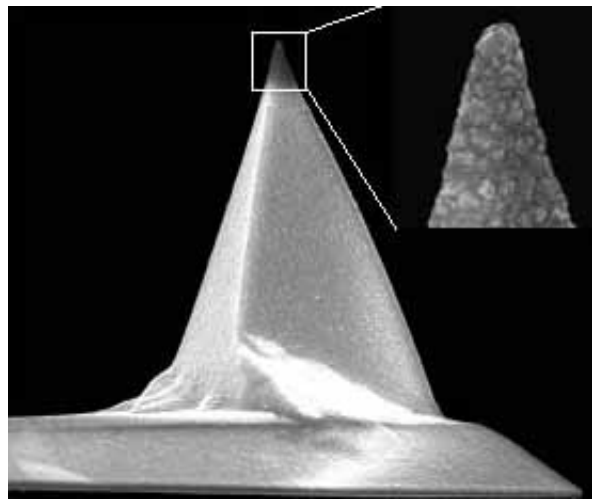


# DD-SICONA

The DD-SICONA Probe offers a unique combination of hardness and conducting tip. The tip side of these probes is coated with polycrystalline diamond. The diamond film is in-situ doped with boron to make it highly conducting. The reflex side of the cantilever is coated with Aluminum. These probes are based on the Applied nanostructures SICONA probes which are silicon probes designed for contact mode applications. These probes feature long, thin cantilevers, which allow for a lower spring constant and improved laser clearance, and have Aluminum coating on the reflex side to increase laser signal quality.

## Tip Specifications

- **Material:** Silicon
- **Shape:** Pyramidal
- **Height ( $\mu\text{m}$ ):** 14-16
- **Aspect ratio:** 1.5-3.0
- **ROC (nm) :** 100-300
- **Coating:** 100nm Doped Diamond



## Cantilever Specifications

Material	: Silicon
Shape	: Rectangular
Reflex coating	: Al, 50 nm $\pm$ 5

Parameter	Nominal	Min	Max
k (N/m)	0.2	0.1	0.6
f (kHz)	12.0	11.0	18.0
Length ( $\mu\text{m}$ )	450.0	440.0	460.0
Width ( $\mu\text{m}$ )	40.0	35.0	45.0
Thickness ( $\mu\text{m}$ )	2.50	2.00	3.00