### **BL-AC55TS**

Description:

#### **OUTSTANDING FEATURES OF OMEGALEVER:**

#### 1. Mega Hz resonance for high speed measurement

The high resonance frequency with 1.6 MHz (Nominal) enables fast scanning measurement.

It can achieve to save your time of AFM data acquisition.

\*For the use of OmegaLever, bandwidth with 2.5 MHz or above is required for the SPM sensor circuit.

# 2. Low thermal noise vibration for unprecedented resolution

It's low thermal noise of cantilever vibration enables high resolution measurement, which attributed to its high resonance frequency and high spring constant. It is worth while trying material research such as liquid-solid interface measurement.

#### 3. Ideally point terminated probe

The apex of the tetrahedral probe is ideally point terminated.

The tetrahedral probe shows good symmetry viewed from the front. Considering the geometric feature, choose the fast scan (X) direction. Check Scan line profile and enlarged view of the tip apex.

#### 4. Acclaimed 'Tip View' structure

The probe can be easily positioned at the exact point of your interest due to 'Tip View' structure.

The probe is located at the exact end of the cantilever so that the probe apex is not obscured during optical observations.

#### 5. Reflex side gold coating

Thin gold film with the thickness of 70 nm is coated on the cantilever for reflecting light from the deflection sensor in the AFM equipment. High reflex for high S/N sensing can be expected.

Unlikely with aluminum coating, gold coating less contaminates sample surface in water.

# 6. Ease in chip handling: 'New concept chip'

The ideally vertical side-walls of the chip make tweezing easy and eliminate problems with chipping and debris.

# BL-AC55TS Specification

Frequency (kHz):	1,600.0
Max Frequency (kHz):	2,500.0
Min Frequency (kHz):	800.0
Spring Constant (N/m):	85.0
Max Spring Constant (N/m):	184.0
Min Spring Constant (N/m):	3,823.0
Tip Radius (nm):	7.0
Tip Height (nm):	12.0
Max Tip Height (nm):	16.0
Min Tip Height (nm):	8.0
Length, Width, Thickness (µm):	55 x 31 x 2.4
Tip Shape:	3 sided
Tip Material:	Silicon
Tip Coating:	None
Reflective Coating:	Cr/Au
Manufacturer:	Olympus