AC240TS-R3

Description：

The new OMCL-AC240 series cantilevers with ‘New Concept Chip’ designed for AC mode AFM in air to observe topography and viscoelasticity of soft samples.

1. Small spring constant for the measurements of soft samples
Spring constant of 2 N/m(Typ.) is the smallest in our silicon cantilevers for AC mode, suitable for observing surface topography and viscoelasticity of soft samples.

2. Measuring surface potential with low resistivity silicon
Cantilever base material employs N-type doped silicon with a surface resistance of 0.01-0.02 Ω · cm (1/200th the surface resistance of our other base materials). This can be achieved to use for measuring surface potential and other applications.

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.

4. Acclaimed ‘TipView’ structure
The probe can be easily positioned at the exact point of your interest due to ‘TipView’ 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 aluminum coating
Thin aluminum film with the thickness of 100 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.

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.

AC204TS-R3 Specification

Frequency (kHz):	70.0
Max Frequency (kHz):	90.0
Min Frequency (kHz):	50.0
Spring Constant (N/m):	2.0
Max Spring Constant (N/m):	3.5
Min Spring Constant (N/m):	0.62
Tip Radius (nm):	7.0
Tip Height (nm):	14.0
Max Tip Height (nm):	15.0
Min Tip Height (nm):	13.0
Length, Width, Thickness (µm):	240 x 40 x 2.3
Tip Shape:	3 sided
Tip Material:	Silicon
Tip Coating:	None
Reflective Coating:	Al
Manufacturer:	Olympus