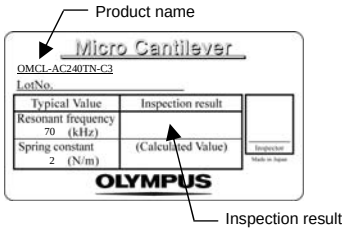
Micro cantilever

Product name

OMCL-AC240TN-C3

Silicon cantilever with a sharpened tetrahedral tip



OMCL - AC 240 T N – C 3

OMCL : Olympus Micro Cantilever
AC : main application is AC mode measurement
240 : Lever length of 240 μm
T : sharpened Tetrahedral tip
N : No reflex metal coating
C : 24 chips / unit
3 : Chip thickness 0.3 mm, Rectangular cross section chip

Chip

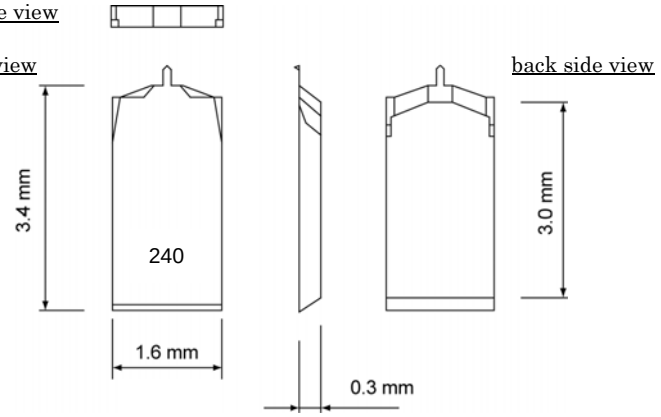
There is a rectangular cantilever on one side of the silicon chip.

Dimension

front side view

tip side view

back side view

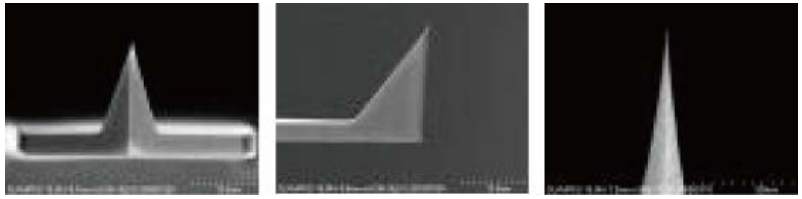


Material

Tip & Lever	Silicon (0.01 – 0.02 ohm.cm)
Metal coating (tip side)	Non
Metal coating (ref ; ex side)	Non
Chip	Silicon (0.01 – 0.02 ohm.cm)

Probe

The probe is a sharpened tetrahedral. The probe is fabricated on the exact end of each cantilever.



Front Side Front (probe apex)

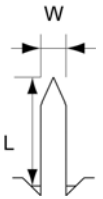
Dimensions

	Typical value	Typical range
Probe length (μm)	14	9 - 19
Tip radius (nm)	7	4 - 10
Probe tip half angle (deg.)	(axis) less than 17.5 (side) less than 17.5	
Probe side tip angle (deg.)	(front) 0, (back) 35 (side) 18, 18	

Cantilever

Dimensions

Cantilever length L (μm)	240 (±15)
Cantilever width W (μm)	40 (±2)
Cantilever thickness t (μm)	2.3 (±0.7)



Calculated mechanical properties

	Typical value	Typical range
Resonant frequency (kHz)	70	50 - 90
Spring constant (N/m)	2	0.6 - 3.5

OLYMPUS