AFM Probe (Silicon, Carbon, Diamond)

STM tip (Platinum-Iridium, Nickel, Tungsten)

나노월드 실리콘 캔틸레버

나노툴즈 탄소 나노탐침

ADT 다이아몬드 프로브

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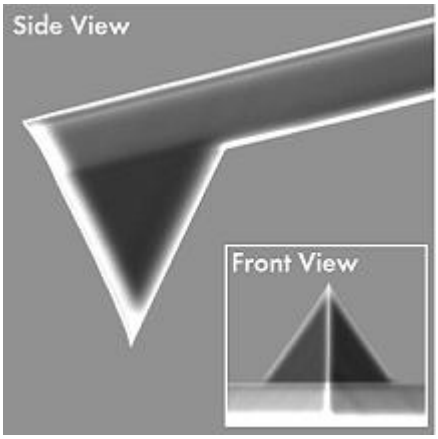
Non Contact / Tapping Mode AFM Sensors



Arrow UHV Arrow type Silicon AFM Probe

공진주파수 : 1.5 MHz
힘 상수 : - N/m
두께 : 1.0 um
폭 : 42 um
길이 : 35 um

주문번호
Arrow UHV-10 (Sensor 10 개)
Arrow UHV-20 (Sensor 20 개)

Arrow NC Arrow type Silicon AFM Probe

공진주파수 : 285 kHz
힘 상수 : 42 N/m
두께 : 4.6 um
폭 : 45 um
길이 : 160 um

주문번호
Arrow NC-10 (Sensor 10 개)
Arrow NC-20 (Sensor 20 개)
Arrow NC-50 (Sensor 50 개)
Arrow NC-W (Sensor 385 개)

Arrow NCR Arrow type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 285 kHz
힘 상수 : 42 N/m
두께 : 4.6 um
폭 : 45 um
길이 : 160 um

주문번호
Arrow NCR-10 (Sensor 10 개)
Arrow NCR-20 (Sensor 20 개)
Arrow NCR-50 (Sensor 50 개)
Arrow NCR-W (Sensor 385 개)

Arrow NCPt Arrow type Silicon AFM Probe (detector/tip side : Pt/Ir coating)

Detector/tip side : Pt/Ir coating
공진주파수 : 285 kHz
힘 상수 : 42 N/m
두께 : 4.6 um
폭 : 45 um
길이 : 160 um

주문번호
Arrow NCPt-10 (Sensor 10 개)
Arrow NCPt-20 (Sensor 20 개)
Arrow NCPt-50 (Sensor 50 개)
Arrow NCPt-W (Sensor 385 개)

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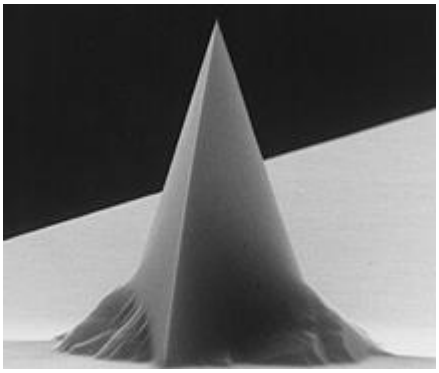

NCH Point Probe type Silicon AFM Probe

공진주파수 : 320 kHz
힘 상수 : 42 N/m
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
NCH-10 (Sensor 10 개)
NCH-20 (Sensor 20 개)
NCH-50 (Sensor 50 개)
NCH-W (Sensor 385 개)

NCHR Point Probe type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
NCHR-10 (Sensor 10 개)
NCHR-20 (Sensor 20 개)
NCHR-50 (Sensor 50 개)
NCHR-W (Sensor 385 개)

NCHPt Point Probe type Silicon AFM Probe (detector/tip side : Pt/Ir coating)

Detector/tip side : Pt/Ir coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
NCHPt-10 (Sensor 10 개)
NCHPt-20 (Sensor 20 개)
NCHPt-50 (Sensor 50 개)
NCHPt-W (Sensor 385 개)

NCST Point Probe type Silicon AFM Probe

공진주파수 : 160 kHz
힘 상수 : 7.4 N/m
두께 : 2.8 um
폭 : 27 um
길이 : 150 um

주문번호
NCST-10 (Sensor 10 개)
NCST-20 (Sensor 20 개)
NCST-50 (Sensor 50 개)
NCST-W (Sensor 385 개)

NCSTR Point Probe type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 160 kHz
힘 상수 : 7.4 N/m
두께 : 2.8 um
폭 : 27 um
길이 : 150 um

주문번호
NCSTR-10 (Sensor 10 개)
NCSTR-20 (Sensor 20 개)
NCSTR-50 (Sensor 50 개)
NCSTR-W (Sensor 385 개)

NCL Point Probe type Silicon AFM Probe, long cantilever

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공진주파수 : 190 kHz
힘 상수 : 48 N/m
두께 : 7 um
폭 : 38 um
길이 : 225 um

주문번호
NCL-10 (Sensor 10 개)
NCL-20 (Sensor 20 개)
NCL-50 (Sensor 50 개)
NCL-W (Sensor 385 개)

NCLR Point Probe type Silicon AFM Probe, long cantilever (detector side : Al coating)

Detector side : Al coating
공진주파수 : 190 kHz
힘 상수 : 48 N/m
두께 : 7 um
폭 : 38 um
길이 : 225 um

주문번호
NCLR-10 (Sensor 10 개)
NCLR-20 (Sensor 20 개)
NCLR-50 (Sensor 50 개)
NCLR-W (Sensor 385 개)

NCLPt Point Probe type Silicon AFM Probe, long cantilever (detector/tip side : Pt/Ir coating)

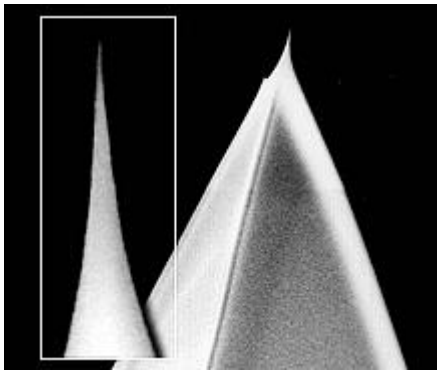
Detector/tip side : Pt/Ir coating
공진주파수 : 190 kHz
힘 상수 : 48 N/m
두께 : 7 um
폭 : 38 um
길이 : 225 um

주문번호
NCLPt-10 (Sensor 10 개)
NCLPt-20 (Sensor 20 개)
NCLPt-50 (Sensor 50 개)
NCLPt-W (Sensor 385 개)

SEIHR Point Probe type Silicon AFM Probe (detector side : Al coating)

Seico Instruments AFM 용
Detector side : Al coating
공진주파수 : 130 kHz
힘 상수 : 15 N/m
두께 : 5 um
폭 : 33 um
길이 : 225 um

주문번호
SEIHR-10 (Sensor 10 개)
SEIHR-20 (Sensor 20 개)
SEIHR-50 (Sensor 50 개)
SEIHR-W (Sensor 385 개)



SSS-NCH Super Sharp type Silicon AFM Probe

공진주파수 : 320 kHz
힘 상수 : 42 N/m
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
SSS NCH-10 (Sensor 10 개)
SSS NCH-20 (Sensor 20 개)
SSS NCH-50 (Sensor 50 개)
SSS NCH-W (Sensor 385 개)

SSS-NCL Super Sharp type Silicon AFM Probe, long cantilever

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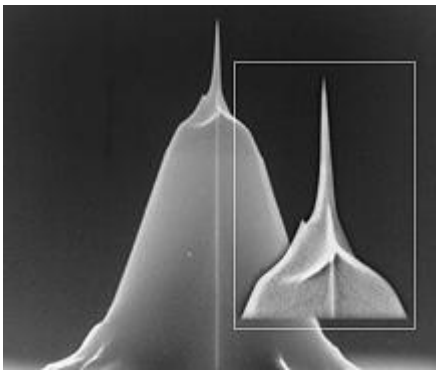
공진주파수 : 190 kHz
힘 상수 : 48 N/m
두께 : 7 um
폭 : 38 um
길이 : 225 um

주문번호
SSS NCL-10 (Sensor 10 개)
SSS NCL-20 (Sensor 20 개)
SSS NCL-50 (Sensor 50 개)
SSS NCL-W (Sensor 385 개)

SSS-SEIH Super Sharp type Silicon AFM Probe

Seico Instruments AFM 용
공진주파수 : 130 kHz
힘 상수 : 15 N/m
두께 : 5 um
폭 : 33 um
길이 : 225 um

주문번호
SSS SEIHR-10 (Sensor 10 개)
SSS SEIHR-20 (Sensor 20 개)
SSS SEIHR-50 (Sensor 50 개)
SSS SEIHR-W (Sensor 385 개)



AR5-NCHR High Aspect Ratio type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
Aspect Ratio >5:1
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
AR5 NCHR-10 (Sensor 10 개)
AR5 NCHR-20 (Sensor 20 개)
AR5 NCHR-50 (Sensor 50 개)
AR5 NCHR-W (Sensor 385 개)

AR5T-NCHR Tilt High Aspect Ratio type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
Aspect Ratio >5:1
기울기 :13 도
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
AR5T NCHR-10 (Sensor 10 개)
AR5T NCHR-20 (Sensor 20 개)
AR5T NCHR-50 (Sensor 50 개)
AR5T NCHR-W (Sensor 385 개)

AR10-NCHR High Aspect Ratio type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
Aspect Ratio >10:1
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
AR10T NCHR-10 (Sensor 10 개)
AR10T NCHR-20 (Sensor 20 개)
AR10T NCHR-50 (Sensor 50 개)
AR10T NCHR-W (Sensor 385 개)

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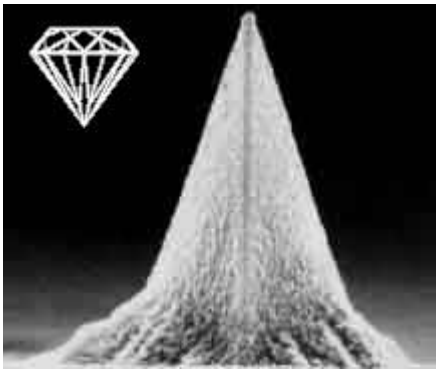
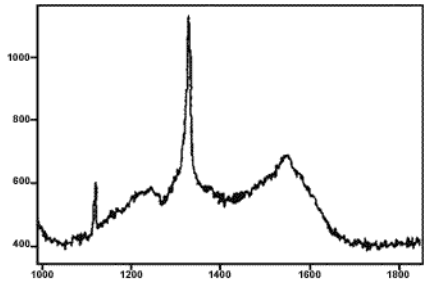
AR5-NCLR High Aspect Ratio Silicon AFM Probe, long cantilever (detector side : Al coating)

Detector side : Al coating
공진주파수 : 190 kHz
힘 상수 : 48 N/m
Aspect Ratio >5:1
두께 : 7 um
폭 : 38 um
길이 : 225 um

주문번호
AR5 NCLR-10 (Sensor 10 개)
AR5 NCLR-20 (Sensor 20 개)
AR5 NCLR-50 (Sensor 50 개)
AR5 NCLR-W (Sensor 385 개)





Raman spectrum of the diamond coating

DT-NCHR Diamond Coated Silicon AFM Probe (detector : Al coating, tip : diamond coating)

Detector side : Al coating
Tip side : diamond coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
DT-NCHR-10 (Sensor 10 개)
DT-NCHR-20 (Sensor 20 개)
DT-NCHR-50 (Sensor 50 개)
DT-NCHR-W (Sensor 385 개)

CDT-NCHR Conductive Diamond Coated (detector : Al coating, tip : conductive diamond)

Detector side : Al coating
Tip side : conductive diamond coating
공진주파수 : 320 kHz
힘 상수 : 42 N/m
두께 : 4 um
폭 : 30 um
길이 : 125 um

주문번호
CDT-NCHR-10 (Sensor 10 개)
CDT-NCHR-20 (Sensor 20 개)
CDT-NCHR-50 (Sensor 50 개)
CDT-NCHR-W (Sensor 385 개)

DT-NCLR Diamond Coated, long cantilever (detector : Al coating, tip : diamond coating)

Detector side : Al coating
Tip side : diamond coating
공진주파수 : 190 kHz
힘 상수 : 48 N/m
두께 : 7 um
폭 : 38 um
길이 : 225 um

주문번호
DT-NCLR-10 (Sensor 10 개)
DT-NCLR-20 (Sensor 20 개)
DT-NCLR-50 (Sensor 50 개)
DT-NCLR-W (Sensor 385 개)

CDT-NCLR Conductive Diamond Coated, long cantilever (detector : Al, tip : conductive diamond)

Detector side : Al coating
Tip side : conductive diamond coating

주문번호
CDT-NCLR-10 (Sensor 10 개)

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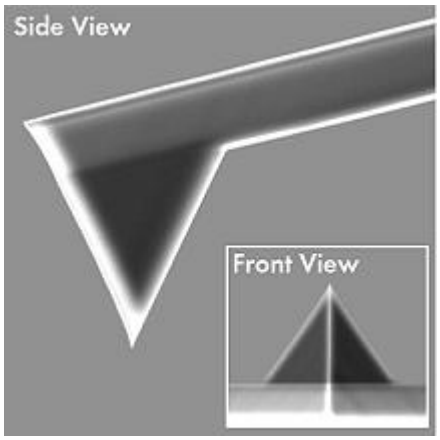
공진주파수 : 190 kHz
힘 상수 : 48 N/m
두께 : 7 um
폭 : 38 um
길이 : 225 um

CDT-NCLR-20 (Sensor 20 개)
CDT-NCLR-50 (Sensor 50 개)
CDT-NCLR-W (Sensor 385 개)

Force Modulation Mode AFM Sensors



Arrow FM Arrow type Silicon AFM Probe

공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 35 um
길이 : 240 um

주문번호
Arrow FM-10 (Sensor 10 개)
Arrow FM-20 (Sensor 20 개)
Arrow FM-50 (Sensor 50 개)
Arrow FM-W (Sensor 385 개)

Arrow FMR Arrow type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 35 um
길이 : 240 um

주문번호
Arrow FMR-10 (Sensor 10 개)
Arrow FMR-20 (Sensor 20 개)
Arrow FMR-50 (Sensor 50 개)
Arrow FMR-W (Sensor 385 개)

Arrow FM Arrow type Silicon AFM Probe

공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 35 um
길이 : 240 um

주문번호
Arrow FM-10 (Sensor 10 개)
Arrow FM-20 (Sensor 20 개)
Arrow FM-50 (Sensor 50 개)
Arrow FM-W (Sensor 385 개)

Arrow FMR Arrow type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

주문번호
Arrow FMR-10 (Sensor 10 개)
Arrow FMR-20 (Sensor 20 개)
Arrow FMR-50 (Sensor 50 개)
Arrow FMR-W (Sensor 385 개)

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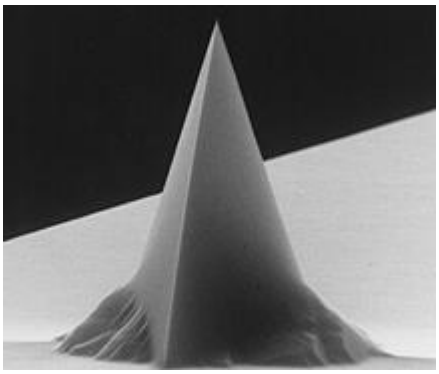


FM Point Probe type Silicon AFM Probe

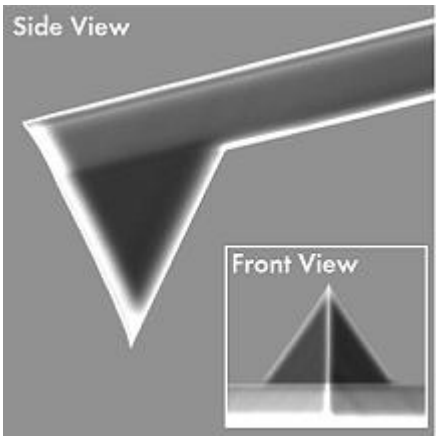
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

주문번호
FM-10 (Sensor 10 개)
FM-20 (Sensor 20 개)
FM-50 (Sensor 50 개)
FM-W (Sensor 385 개)

FMR Point Probe type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

주문번호
FMR-10 (Sensor 10 개)
FMR-20 (Sensor 20 개)
FMR-50 (Sensor 50 개)
FMR-W (Sensor 385 개)



Arrow EFM Electrostatic Force Mode Silicon AFM Probe (detector/tip side : Pt/Ir coating)

Detector/tip side : Pt/Ir coating
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 35 um
길이 : 240 um

주문번호
Arrow EFM-10 (Sensor 10 개)
Arrow EFM-20 (Sensor 20 개)
Arrow EFM-50 (Sensor 50 개)
Arrow EFM-W (Sensor 385 개)

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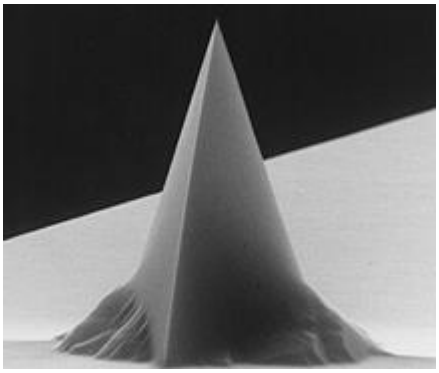


EFM Electrostatic Force Mode Silicon AFM Probe (detector/tip side : Pt/Ir coating)

Detector/tip side : Pt/Ir coating
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

주문번호
EFM-10 (Sensor 10 개)
EFM-20 (Sensor 20 개)
EFM-50 (Sensor 50 개)
EFM-W (Sensor 385 개)

MFMR Magnetic Force Mode Silicon AFM Probe (detector side : Al coating, tip side : Cobalt)

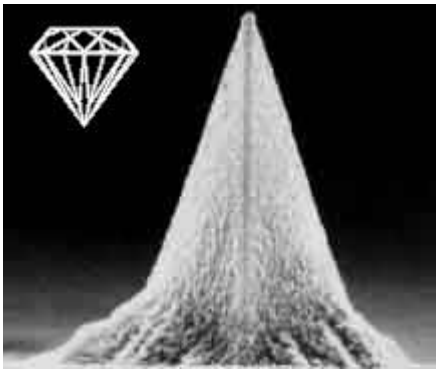
Detector side : Al coating
Tip side : cobalt
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

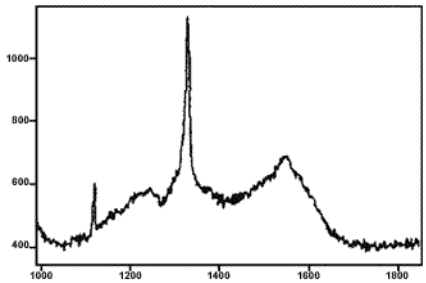
주문번호
MFMR-10 (Sensor 10 개)
MFMR-20 (Sensor 20 개)
MFMR-50 (Sensor 50 개)
MFMR-W (Sensor 385 개)

S-MFMR Magnetic Force Mode Silicon AFM Probe (detector side : Al coating, tip side : Cobalt)

Detector side : Al coating
Tip side : cobalt
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

주문번호
S-MFMR-10 (Sensor 10 개)
S-MFMR-20 (Sensor 20 개)
S-MFMR-50 (Sensor 50 개)
S-MFMR-W (Sensor 385 개)





Raman spectrum of the diamond coating

DT-FMR Diamond Coated Silicon AFM Probe (detector side : Al coating, tip side : diamond)

Detector side : Al coating
Tip side : diamond
공진주파수 : 75 kHz

주문번호
DT-FMR-10 (Sensor 10 개)
DT-FMR-20 (Sensor 20 개)

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힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

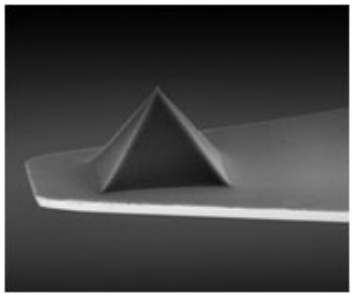
DT-FMR-50 (Sensor 50 개)
DT-FMR-W (Sensor 385 개)

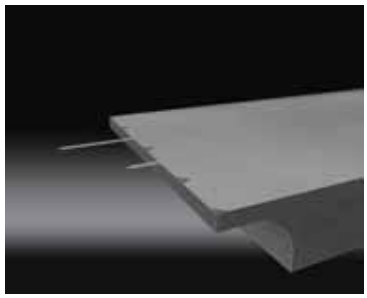
CDT-FMR Conductive Diamond Coated (detector side : Al coating, tip side : conductive diamond)

Detector side : Al coating
Tip side : conductive diamond
공진주파수 : 75 kHz
힘 상수 : 2.8 N/m
두께 : 3.0 um
폭 : 28 um
길이 : 225 um

주문번호
CDT-FMR-10 (Sensor 10 개)
CDT-FMR-20 (Sensor 20 개)
CDT-FMR-50 (Sensor 50 개)
CDT-FMR-W (Sensor 385 개)

Contact Mode AFM Sensors

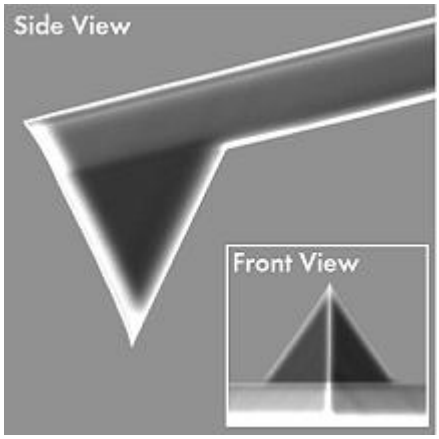




PNP DB Pyrex Nitride Diving Board Cantilever

공진주파수 (Cantilever 1) : 67 kHz
공진주파수 (Cantilever 2) : 17 kHz
힘 상수 (Cantilever) : 0.48 N/m
힘 상수 (Cantilever 2) : 0.06 N/m
Cantilever 1 두께 : 600 nm, 폭 : 40 um, 길이 : 100 um
Cantilever 2 두께 : 600 nm, 폭 : 40 um, 길이 : 200 um

주문번호
PNP-DB-20 (Sensor 20 개)
PNP-DB-50 (Sensor 50 개)



Arrow CONT Arrow type Silicon AFM Probe

공진주파수 : 14 kHz
힘 상수 : 0.2 N/m
두께 : 2.0 um
폭 : 45 um

주문번호
Arrow CONT-10 (Sensor 10 개)
Arrow CONT-20 (Sensor 20 개)
Arrow CONT-50 (Sensor 50 개)

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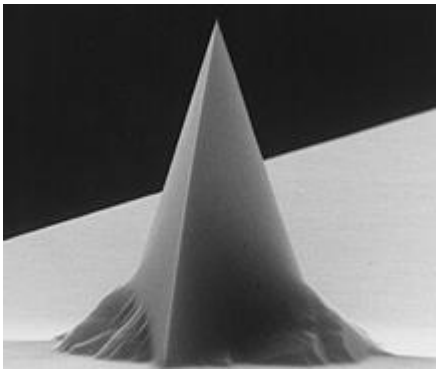
길이 : 450 um

Arrow CONT-W (Sensor 385 개)

Arrow CONTR Arrow type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 14 kHz
힘 상수 : 0.2 N/m
두께 : 2.0 um
폭 : 45 um
길이 : 450 um

주문번호
Arrow CONTR-10 (Sensor 10 개)
Arrow CONTR-20 (Sensor 20 개)
Arrow CONTR-50 (Sensor 50 개)
Arrow CONTR-W (Sensor 385 개)



CONT Point Probe type Silicon AFM Probe

공진주파수 : 13 kHz
힘 상수 : 0.2 N/m
두께 : 2.0 um
폭 : 50 um
길이 : 450 um

주문번호
CONT-10 (Sensor 10 개)
CONT-20 (Sensor 20 개)
CONT-50 (Sensor 50 개)
CONT-W (Sensor 385 개)

CONTR Point Probe type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 13 kHz
힘 상수 : 0.2 N/m
두께 : 2.0 um
폭 : 50 um
길이 : 450 um

주문번호
CONTR-10 (Sensor 10 개)
CONTR-20 (Sensor 20 개)
CONTR-50 (Sensor 50 개)
CONTR-W (Sensor 385 개)

CONTPt Point Probe type Silicon AFM Probe (detector/tip side : Pt/Ir coating)

Detector/tip side : Pt/Ir coating
공진주파수 : 13 kHz
힘 상수 : 0.2 N/m
두께 : 2.0 um
폭 : 50 um
길이 : 450 um

주문번호
CONTPt-10 (Sensor 10 개)
CONTPt-20 (Sensor 20 개)
CONTPt-50 (Sensor 50 개)
CONTPt-W (Sensor 385 개)

CONTSC Point Probe type Silicon AFM Probe

공진주파수 : 23 kHz
힘 상수 : 0.2 N/m
두께 : 1.0 um
폭 : 48 um
길이 : 225 um

주문번호
CONTSC-10 (Sensor 10 개)
CONTSC-20 (Sensor 20 개)
CONTSC-50 (Sensor 50 개)
CONTSC-W (Sensor 385 개)

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CONTSCR Point Probe type Silicon AFM Probe (detector side : Al coating)

Detector side : Al coating
공진주파수 : 23 kHz
힘 상수 : 0.2 N/m
두께 : 1.0 um
폭 : 48 um
길이 : 225 um

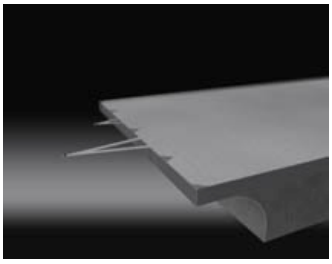
주문번호
CONTSCR-10 (Sensor 10 개)
CONTSCR-20 (Sensor 20 개)
CONTSCR-50 (Sensor 50 개)
CONTSCR-W (Sensor 385 개)

ZEILR Point Probe type Silicon AFM Probe (detector side : Al coating)

Zeiss Veritekt AFM 용
Detector side : Al coating
공진주파수 : 27 kHz
힘 상수 : 1.6 N/m
Low Force Constant
두께 : 5 um
폭 : 57 um
길이 : 225 um

주문번호
ZEILR-10 (Sensor 10 개)
ZEILR-20 (Sensor 20 개)
ZEILR-50 (Sensor 50 개)
ZEILR-W (Sensor 385 개)

Tipless Cantilever



PNP-TR-TL Tipless Pyrex Nitride Diving Board Cantilever

공진주파수 (Cantilever 1) : 67 kHz
공진주파수 (Cantilever 2) : 17 kHz
힘 상수 (Cantilever) : 0.48 N/m
힘 상수 (Cantilever 2) : 0.06 N/m
Cantilever shape : triangular
Cantilever 1 두께 : 600 nm, 폭 : 40 um, 길이 : 100 um
Cantilever 2 두께 : 600 nm, 폭 : 40 um, 길이 : 200 um

주문번호
PNP-TR-TL-20 (Sensor 20 개)
PNP-TR-TL-50 (Sensor 50 개)

PNP-TR-TL-Au Tipless Pyrex Nitride Diving Board Cantilever

Top side : 5nm Titanium, 30nm Gold coating
공진주파수 (Cantilever 1) : 67 kHz
공진주파수 (Cantilever 2) : 17 kHz
힘 상수 (Cantilever) : 0.48 N/m
힘 상수 (Cantilever 2) : 0.06 N/m
Cantilever shape : triangular
Cantilever 1 두께 : 600 nm, 폭 : 40 um, 길이 : 100 um
Cantilever 2 두께 : 600 nm, 폭 : 40 um, 길이 : 200 um

주문번호
PNP-TR-TL-Au-20 (Sensor 20 개)
PNP-TR-TL-Au-50 (Sensor 50 개)

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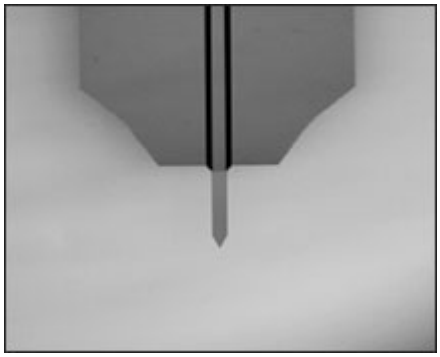


Arrow TL1 Tipless Arrow type Silicon AFM Probe

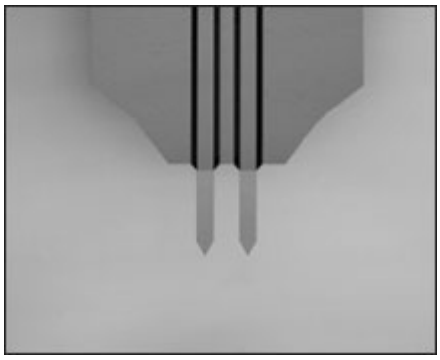
공진주파수 : 6 kHz
힘 상수 : 0.03 N/m
두께 : 1.0 um
폭 : 100 um
길이 : 500 um
Cantilever 1 개

주문번호
Arrow TL1-50 (Sensor 50 개)

Arrow TL1Au Tipless Arrow type Silicon AFM Probe (top side : 5nm Titanium, 30nm Gold coating)

Top side : 5nm Titanium, 30nm Gold coating
공진주파수 : 6 kHz
힘 상수 : 0.03 N/m
두께 : 1.0 um
폭 : 100 um
길이 : 500 um
Cantilever 1 개

주문번호
Arrow TL1Au-50 (Sensor 50 개)



Arrow TL2 Tipless Arrow type Silicon AFM Probe

공진주파수 : 6 kHz
힘 상수 : 0.03 N/m
두께 : 1.0 um
폭 : 100 um
길이 : 500 um
Cantilever 2 개
Cantilever Pitch : 250 um

주문번호
Arrow TL2-50 (Sensor 50 개)

Arrow TL2Au Tipless Arrow type Silicon AFM Probe (top side : 5nm Titanium, 30nm Gold coating)

Top side : 5nm Titanium, 30nm Gold coating
공진주파수 : 6 kHz
힘 상수 : 0.03 N/m
두께 : 1.0 um

주문번호
Arrow TL2Au-50 (Sensor 50 개)

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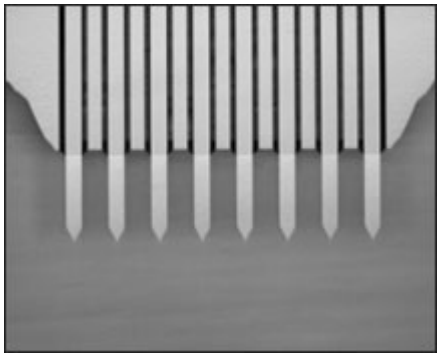
폭 : 100 um
길이 : 500 um
Cantilever 2 개
Cantilever Pitch : 250 um



Arrow TL8 Tipless Arrow type Silicon AFM Probe

공진주파수 : 6 kHz
힘 상수 : 0.03 N/m
두께 : 1.0 um
폭 : 100 um
길이 : 500 um
Cantilever 8 개
Cantilever Pitch : 250 um

주문번호
Arrow TL8-50 (Sensor 50 개)

Arrow TL8Au Tipless Arrow type Silicon AFM Probe (top side : 5nm Titanium, 30nm Gold coating)

Top side : 5nm Titanium, 30nm Gold coating
공진주파수 : 6 kHz
힘 상수 : 0.03 N/m
두께 : 1.0 um
폭 : 100 um
길이 : 500 um
Cantilever 8 개
Cantilever Pitch : 250 um

주문번호
Arrow TL8Au-50 (Sensor 50 개)

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STM tip과 SPM 측정시료

STM tip	Pt/Ir 합금 지름 0.25 mm 와 길이 30 cm 의 Wire 형태로 공급 Wire Cutter 로 절단하여 사용
	10m, 20m 30m 와 같은 긴 길이로 주문 가능
Alignment Chip	
ALIGN-10	Pointprobe, Diamond Coated, High Aspect Ratio, Super Sharp 유형에 맞는 Alignment Chip Set. 10 개 공급
Tip Storage Kit	
TS-KIT	10 개의 ESD Safe Gel Pak 상자와 한 쌍의 집게 공급
ESD Safe Handling Kit	
ESD-KIT	반정전기 고무받침, 3 m 길이의 접지선, 고무받침에 연결되는 팔찌, 접지에 연결되는 홀더와 니퍼, 집게 한 쌍
Calibration Standards	
2D100	SPM 의 XY 축 교정을 위한 Lateral Calibration Standard 역피라미드 격자구조, 100 nm pitch
2D200	SPM 의 XY 축 교정을 위한 Lateral Calibration Standard 역피라미드 격자구조, 200 nm pitch
2D300	SPM 의 XY 축 교정을 위한 Lateral Calibration Standard 역피라미드 격자구조, 300 nm pitch
H8	매우 정교한 Z 축 교정을 위한 Height Standard 8 nm 높이
FLAT	Flatness Standard

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나노툴즈 탄소나노탐침

실리콘 캔틸레버 탐침 끝단에 나노크기의 탄소탐침을 가공한 제품

높은 종횡비 탄소나노탐침 높은 종횡비 측정에 필요한 탁월한 내구성과 신뢰성를 가진 탐침	M1_ArrowNC_13 M1_NCH_13 M1_ESD_NCH_13 MC90-70_ArrowNCR_3 MC60_ArrowNCR_3 MSS_NCHR_13 MSS_NCHR_3 MSS_FMR_13 MSS_FMR_3 CNT300_ArrowNCR_3 EBD2-100_NCH_13 EBD2-100_NCH_3 EBD2-100_NCHR_3
고분해능 탄소나노탐침 매우 예리한 모양의 특수한 Tapping Mode AFM 측정을 위한 탐침	SSE_NCHR_13
범용 탄소나노탐침 고속 원자현미경 측정, 생물학과 나노결각 적용에 적합한 탐침	biotool_PNP_TR_10 B1, B2, B50, B100, B150

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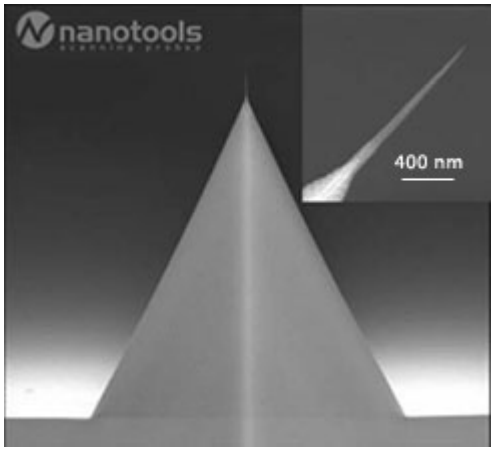
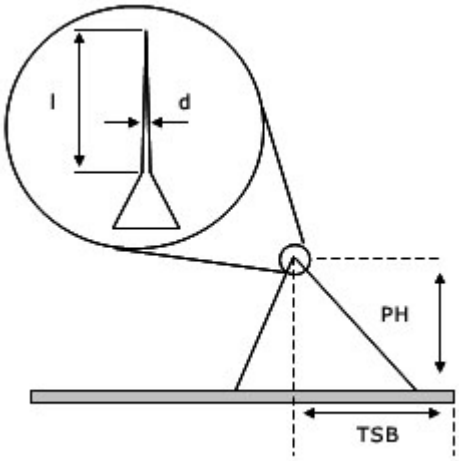
M1_ArrowNC_13

The nanotools® M1_ArrowNC_13 tip is designed for non-contact / high frequency mode, in particular for automated AFM systems for in-line process control as well as general purpose AFM. Excellent lifetime and reliability for high aspect ratio applications are key features.



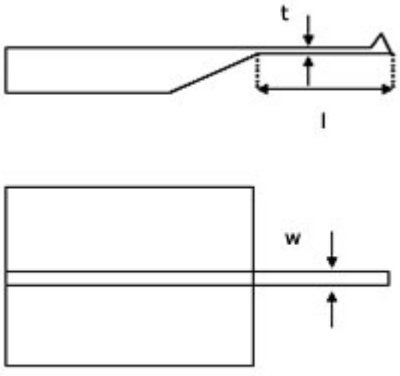
Tip Spec

	nominal	range
Shape	conical	
Tip length (l)	800 nm	+/- 200 nm
Tip radius (r)	< 5 nm	+/- 10 nm
Tip diameter (d) measured at 600nm	70 nm	+/- 10 nm
Tilt compensation	13 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	5.2 um	4- 5.5 um



Cantilever Spec

	nominal	range
Type	Arrow NC	
Shape	beam	
Force constant	42 N/m	27–80 N/m
Resolution frequency	285 kHz	240-380 kHz
length (i)	160 nm	150-170 nm
Width (w)	45 um	32.5–52.5 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : none

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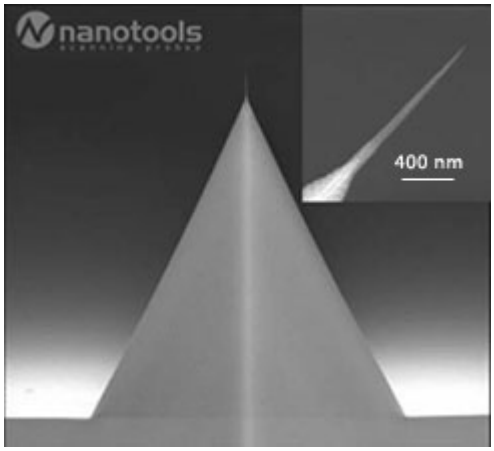
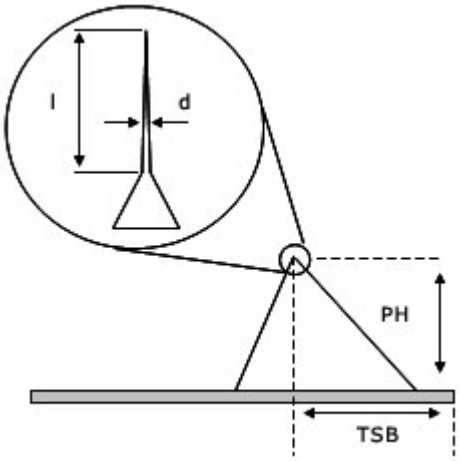
M1_NCH_13



The nanotools® M1_NCH_13 tip is designed for non-contact / high frequency mode, in particular for automated AFM systems for in-line process control as well as general purpose AFM. Excellent lifetime and reliability for high aspect ratio applications are key features.

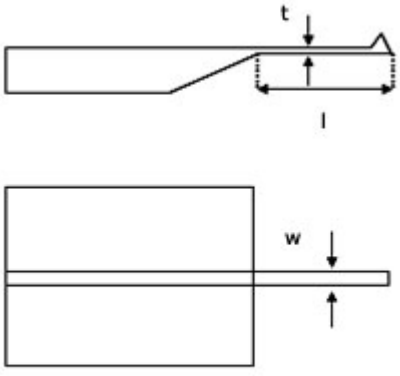
Tip Spec

	nominal	range
Shape	conical	
Tip length (l)	800 nm	+/- 200 nm
Tip radius (r)	< 5 nm	+/- 10 nm
Tip diameter (d) measured at 600nm	70 nm	+/- 10 nm
Tilt compensation	13 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	range
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : none

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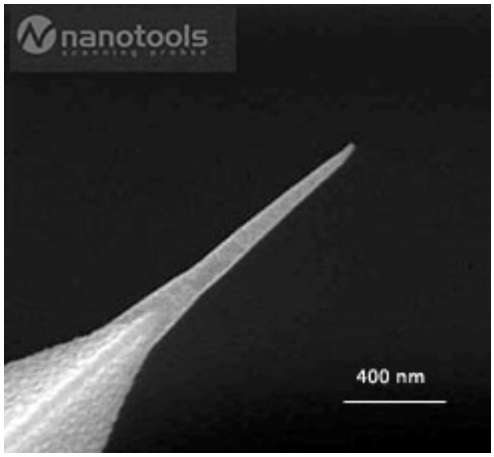
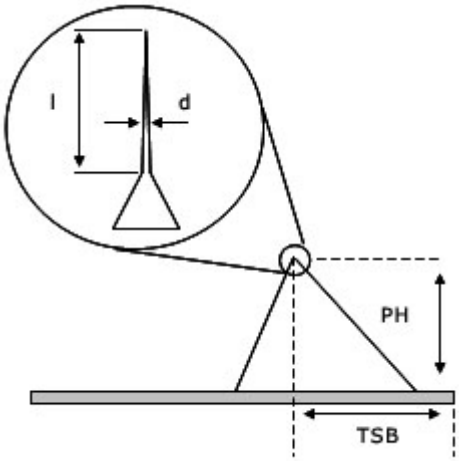
M1_ESD_NCH_13



The nanotools® M1-ESD_NCH_13 probes are designed for non-contact/ high frequency mode, in particular for automated AFM systems for in-line process control as well as general purpose AFM. Its special anti-ESD coating delivers metallic conductivity of the probe without weakening its mechanical strength. For most applications the conductivity of the standard probe (either EBD or highly doped silicon) is sufficient to dissipate static charge - an electric discharge would immediately destroy the tip. However, some applications such as scanning ceramics or photomasks require an even higher level of ESD precautions. Therefore the nanotools® M1-ESD_NCH_13 is the choice.

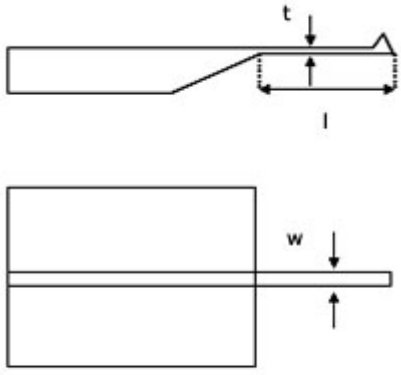
Key features are excellent lifetime and reliability for high aspect ratio applications, where charging of the sample is an issue.

Tip Spec



	nominal	range
Shape	conical	
Tip length (l)	800 nm	+/- 200 nm
Tip radius (r)	< 5 nm	+/- 10 nm
Tip diameter (d) measured at 600nm	70 nm	+/- 10 nm
Tilt compensation	13 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um

Cantilever Spec

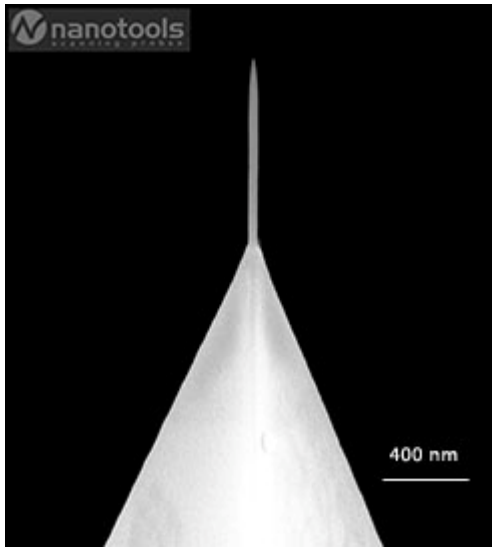


	nominal	Range
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um

Coating

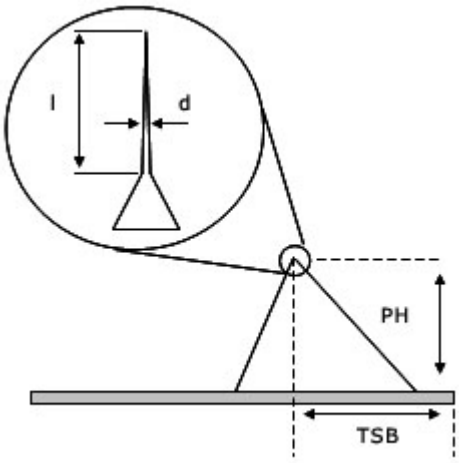
Tip side : very thin Al
Back side : none

MC90-70_ArrowNCR_3



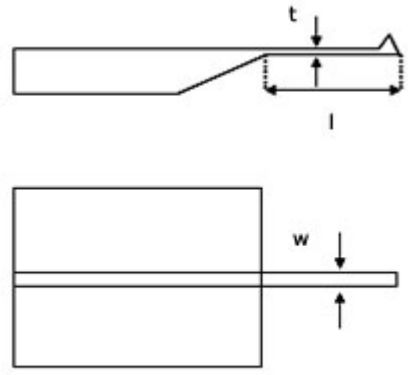
The nanotools® MC90/70 probes feature a perfectly cylindrical tip shape providing the highest repeatability of depth and bottom width measurements (constant bottom travel distance). The nanotools® MC90/70 high aspect ratio probes with cylindrical shape are the AFM In-Line metrology solution for 90 nm and 70 nm. MC tips are tilt compensated and are available for most AFM systems.

Tip Spec



	nominal	**range**
Shape	cylindrical	
Tip length (l)	800 nm	+/- 200 nm
Tip radius (r)	< 5 nm	+/- 7 nm
Tip diameter (d)	55 nm	+/- 5 nm
Tilt compensation	3 deg	+/- 0.5 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	5.2 um	4- 5.5 um

Cantilever Spec



	nominal	**Range**
Type	ArrowNCR	
Shape	beam	
Force constant	42 N/m	27–80 N/m
Resolution frequency	285 kHz	240-380 kHz
length (i)	160 nm	150-170 nm
Width (w)	45 um	37.5–52.5 um
Thickness (t)	4 um	3–5 um

Coating

Tip side : none
Back side : 30 nm Al reflex

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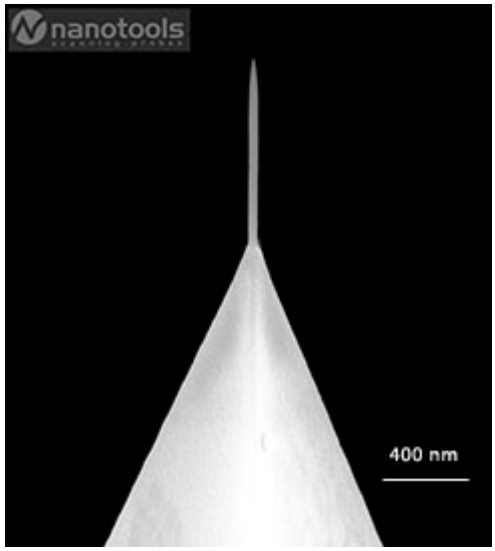
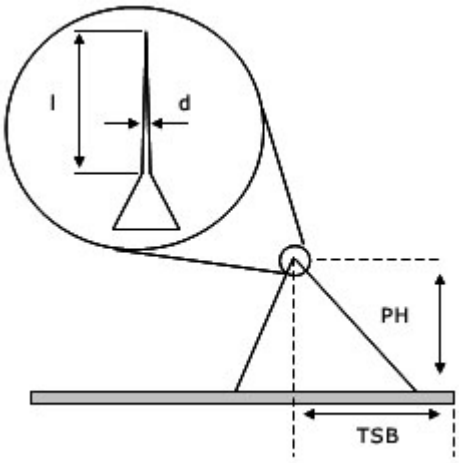
MC60_ArrowNCR_3



The nanotools® MC60 probes feature a perfectly cylindrical tip shape providing the highest repeatability of depth and bottom width measurements (constant bottom travel distance). The nanotools® MC60 high aspect ratio probes with cylindrical shape are the AFM In-Line metrology solution for 60 nm. MC tips are tilt compensated and are available for most AFM systems.

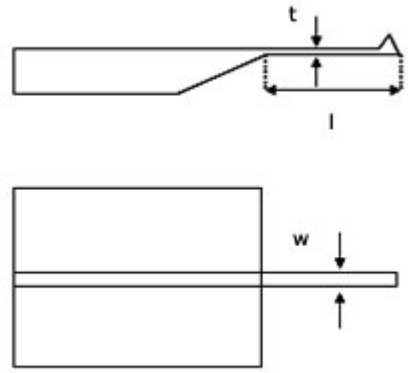
Tip Spec

	nominal	range
Shape	cylindrical	
Tip length (l)	500 nm	+/- 100 nm
Tip radius (r)	< 5 nm	+/- 7 nm
Tip diameter (d)	30 nm	+/- 5 nm
Tilt compensation	3 deg	+/- 0.5 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	5.2 um	4- 5.5 um



Cantilever Spec

	nominal	Range
Type	ArrowNCR	
Shape	beam	
Force constant	42 N/m	27–80 N/m
Resolution frequency	285 kHz	240-380 kHz
length (i)	160 nm	150-170 nm
Width (w)	45 um	37.5–52.5 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : 30 nm Al reflex

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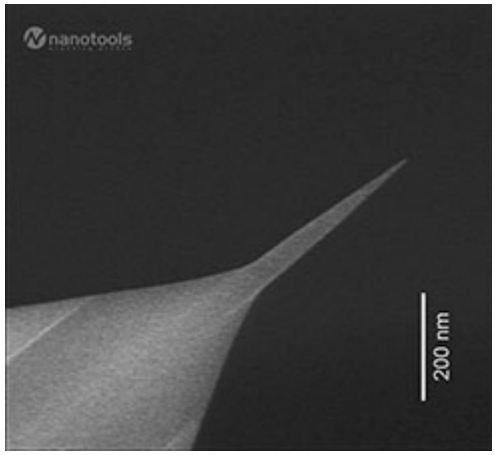
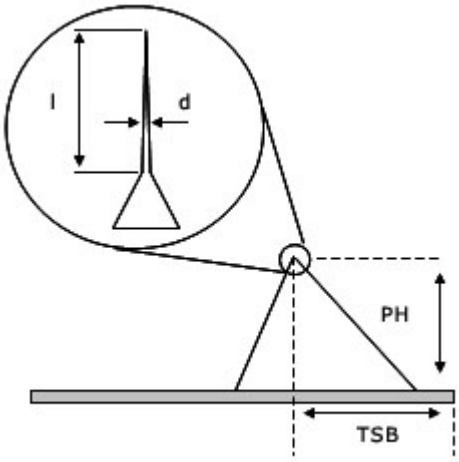
MSS_NCHR_13

Multipurpose high resolution probe with excellent lifetime and reliability. The nanotools® MSS_NCHR_13 tip is designed for non-contact / high frequency mode. It delivers outstanding resolution in critical AFM applications even on hard, tip eating samples like ceramics, silicon oxide/nitride or polysilicon to name a few.



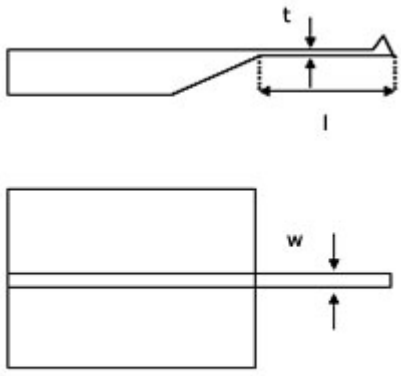
Tip Spec

	nominal	range
Shape	conical	
Tip length (l)	400 nm	+/- 100 nm
Tip radius (r)	< 2-3 nm	+/- 5 nm
Tip diameter (d) measured at 300nm	20 nm	+/- 5 nm
Tilt compensation	13 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	range
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : 30 nm Al reflex

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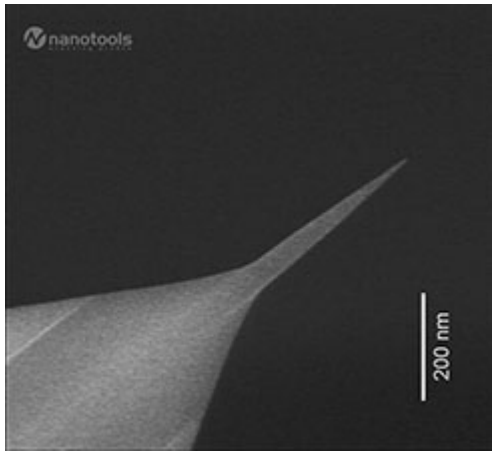
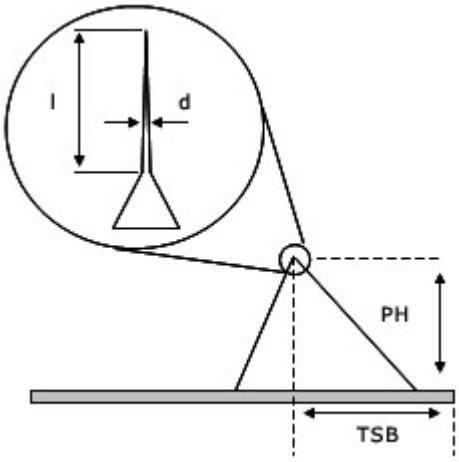
MSS_NCHR_3



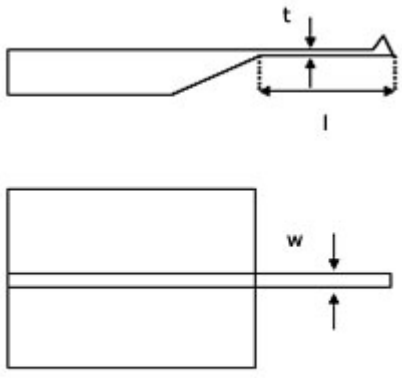
Multipurpose high resolution probe with excellent lifetime and reliability. The nanotools® MSS_NCHR_3 tip is designed for non-contact / high frequency mode. It delivers outstanding resolution in critical AFM applications even on hard, tip eating samples like ceramics, silicon oxide/nitride or polysilicon to name a few.

Tip Spec



	nominal	**range**
Shape	conical	
Tip length (l)	400 nm	+/- 100 nm
Tip radius (r)	< 2-3 nm	+/- 5 nm
Tip diameter (d) measured at 300nm	20 nm	+/- 5 nm
Tilt compensation	3 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um

Cantilever Spec



	nominal	**range**
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um

Coating

Tip side : none
Back side : 30 nm Al reflex

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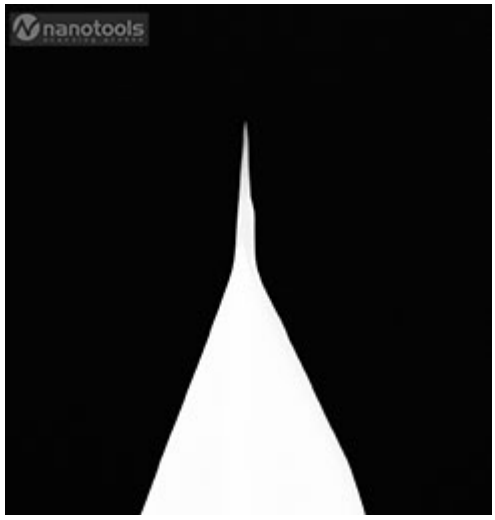
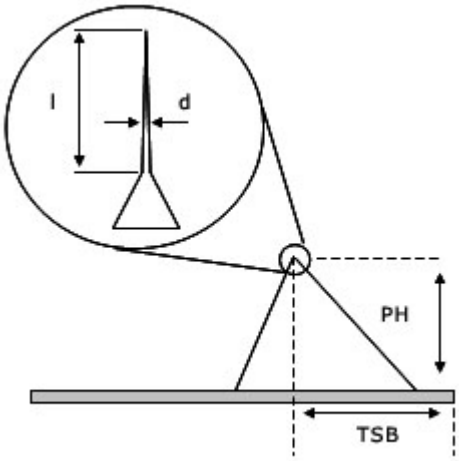
MSS_FMR_13



Due to the softer FMR cantilever this multipurpose high resolution probe approaches ultimative lifetime and reliability. The special qualities of our MSS PatternedMedia also lead to the best interaction between tip and cantilever. The nanotools® MSS_FMR_13 tip is designed for non-contact / high frequency mode. It delivers outstanding resolution in critical AFM applications even on hard, tip eating samples like ceramics, silicon oxide/nitride or polysilicon to name a few.

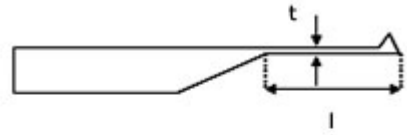
Tip Spec

	nominal	**range**
Shape	conical	
Tip length (l)	400 nm	+/- 100 nm
Tip radius (r)	< 2-3 nm	+/- 5 nm
Tip diameter (d) measured at 300nm	15 nm	+/- 5 nm
Tilt compensation	3 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	**range**
Type	FMR	
Shape	beam	
Force constant	2.8 N/m	0.5–9.5 N/m
Resonance frequency	75 kHz	40-115 kHz
length (i)	225 nm	215-235 nm
Width (w)	28 um	20–35 um
Thickness (t)	3 um	2–4 um



Coating

Tip side : none
Back side : reflex

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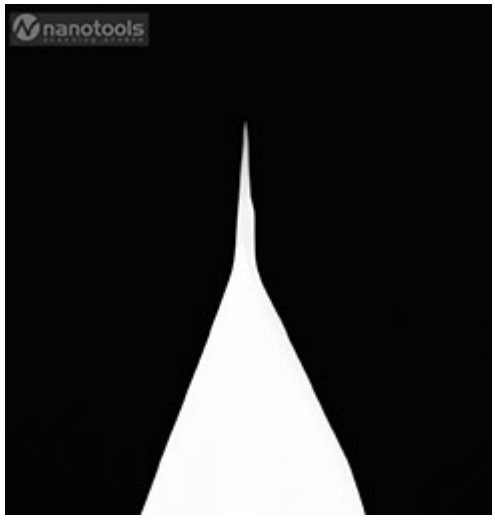
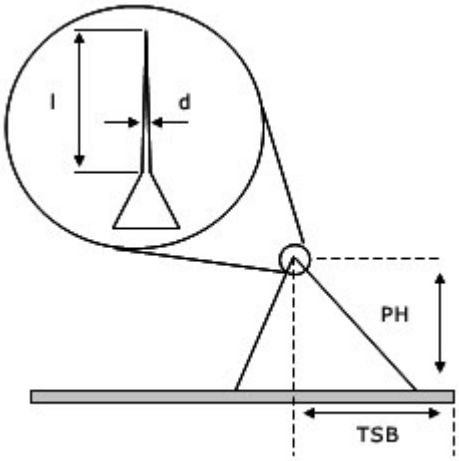
MSS_FMR_3



Due to the softer FMR cantilever this multipurpose high resolution probe approaches ultimative lifetime and reliability. The special qualities of our MSS PatternedMedia also lead to the best interaction between tip and cantilever. The nanotools® MSS_FMR_3 tip is designed for non-contact / high frequency mode. It delivers outstanding resolution in critical AFM applications even on hard, tip eating samples like ceramics, silicon oxide/nitride or polysilicon to name a few.

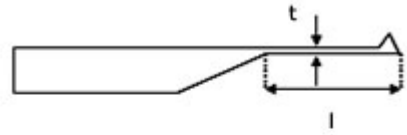
Tip Spec

	nominal	**range**
Shape	conical	
Tip length (l)	400 nm	+/- 100 nm
Tip radius (r)	< 2-3 nm	+/- 5 nm
Tip diameter (d) measured at 300nm	15 nm	+/- 5 nm
Tilt compensation	3 deg	+/- 0.5 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	**range**
Type	FMR	
Shape	beam	
Force constant	2.8 N/m	0.5–9.5 N/m
Resonance frequency	75 kHz	40-115 kHz
length (i)	225 nm	215-235 nm
Width (w)	28 um	20–35 um
Thickness (t)	3 um	2–4 um



Coating

Tip side : none
Back side : reflex

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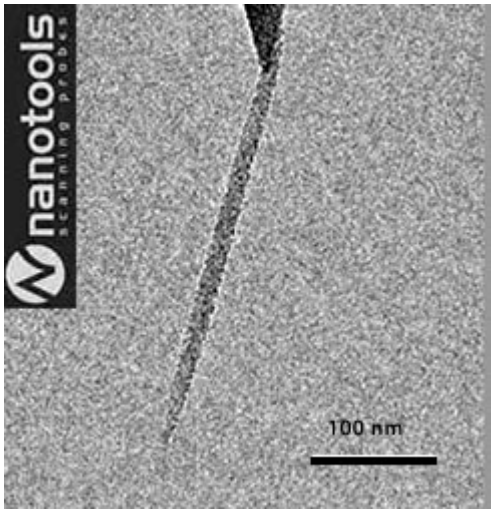
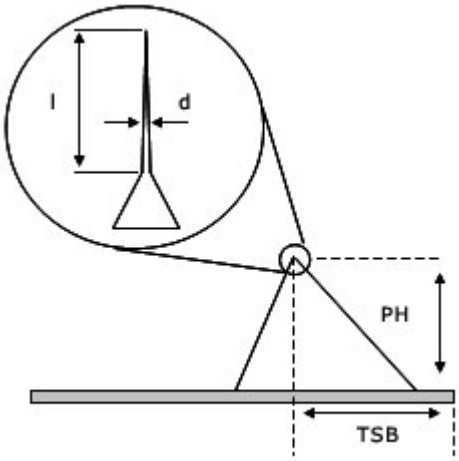
CNT300_ArrowNCR_3



The nanotools® M*-CNT is not using a multiwall carbon nanotube attached to a silicon cantilever. Moreover we pushed our proven EBD technology to the dimensions of a CNT, but maintaining EBD´s key strength: precise tip orientation, precise control in tip dimensions (length and diameter), large volume production. What is critical in nanotube technology is solved for the M*-CNT:

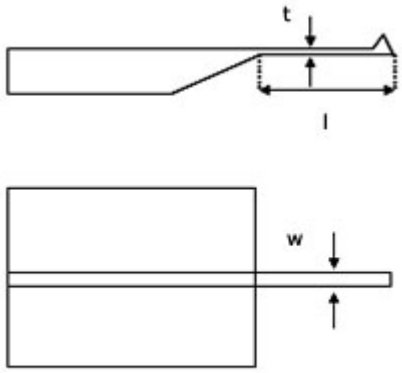
- controlled tip length
- controlled tip orientation (angle accuracy better 0.5deg)
- automated fabrication process

Tip Spec



	nominal	**range**
Shape	cylindrical	
Tip length (l)	300 nm	+/- 50 nm
Tip radius (r)	< 2-3 nm	+/- 5 nm
Tip diameter (d)	20 nm	+/- 5 nm
Tilt compensation	3 deg	+/- 0.5 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	5.2 um	4- 5.5 um

Cantilever Spec



	nominal	**Range**
Type	ArrowNCR	
Shape	beam	
Force constant	42 N/m	27–80 N/m
Resolution frequency	285 kHz	240-380 kHz
length (i)	160 nm	150-170 nm
Width (w)	45 um	37.5–52.5 um
Thickness (t)	4.6 um	3.6–5.6 um

Coating

Tip side : none
Back side : 30 nm Al reflex

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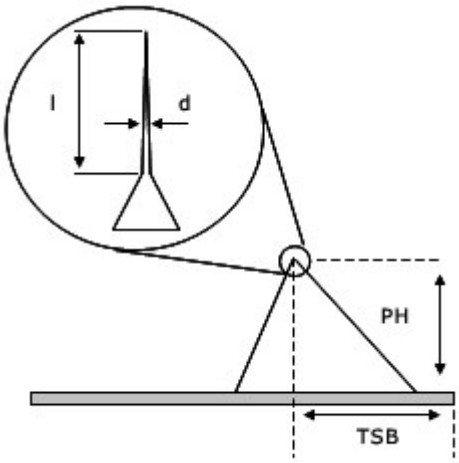
EBD2-100_NCH_13

The nanotools® EBD2-100_NCH_13 tip is designed for non-contact / high frequency mode, in particular for automated AFM systems for in-line process control as well as general purpose AFM. Excellent lifetime and reliability for high aspect ratio applications are key features.

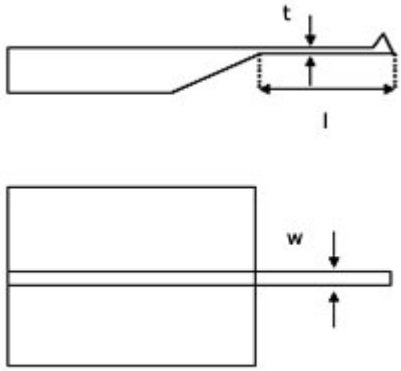
Tip Spec

	nominal	range
Shape	conical	
Tip length (l)	2000 nm	+/- 600 nm
Tip radius (r)	< 5 nm	+/- 10 nm
Tip diameter (d) measured at 1000nm	< 100 nm	80-100 nm
Tilt compensation	13 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	range
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : none

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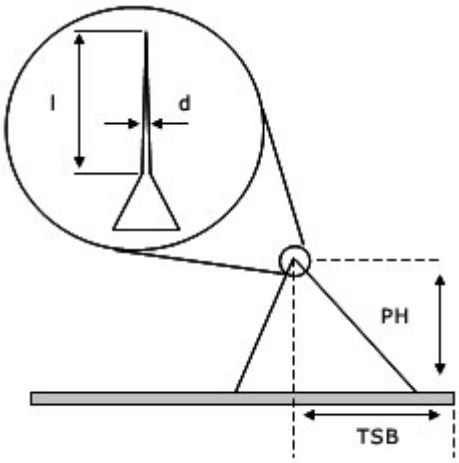
EBD2-100_NCH_3

The nanotools® EBD2-100_NCH_3 tip is designed for non-contact / high frequency mode, in particular for automated AFM systems for in-line process control as well as general purpose AFM. Excellent lifetime and reliability for high aspect ratio applications are key features.

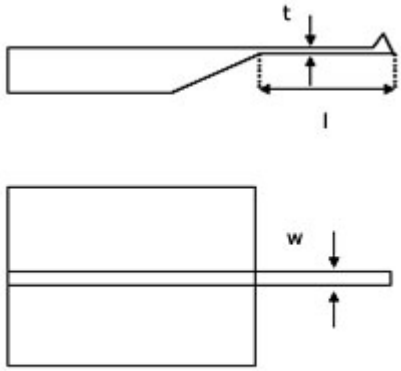
Tip Spec

	nominal	range
Shape	conical	
Tip length (l)	2000 nm	+/- 600 nm
Tip radius (r)	< 5 nm	+/- 10 nm
Tip diameter (d) measured at 1000nm	< 100 nm	80-100 nm
Tilt compensation	3 deg	+/- 0.5 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	range
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : none

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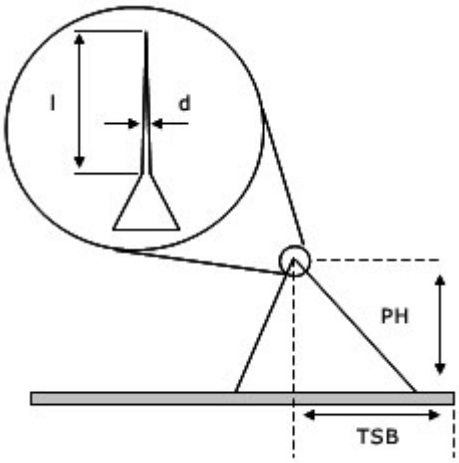
EBD2-100_NCHR_3

The nanotools® EBD2-100_NCHR_3 tip is designed for non-contact / high frequency mode, in particular for automated AFM systems for in-line process control as well as general purpose AFM. Excellent lifetime and reliability for high aspect ratio applications are key features.

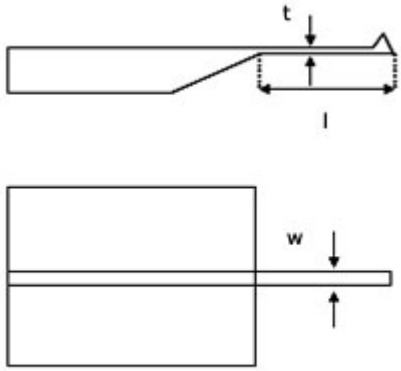
Tip Spec

	nominal	**range**
Shape	conical	
Tip length (l)	2000 nm	+/- 600 nm
Tip radius (r)	< 5 nm	+/- 10 nm
Tip diameter (d) measured at 1000nm	< 100 nm	80-100 nm
Tilt compensation	3 deg	+/- 0.5 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	**range**
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : 30 nm Al reflex

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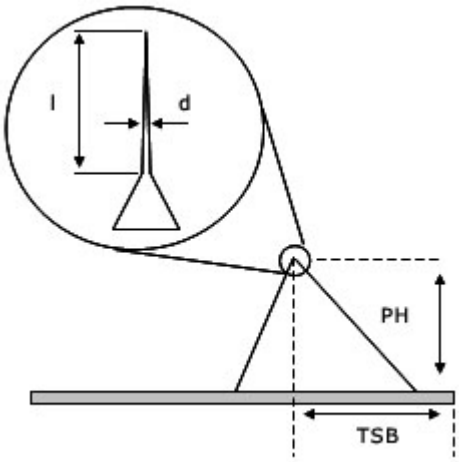
SSE_NCHR_13

2 nm tip radius, high resolution probe with excellent lifetime and reliability. The nanotools® SSE - SuperSharp Enhanced is designed for non-contact / high frequency mode. It delivers outstanding resolution and image stability in critical AFM applications even on hard, tip eating samples like ceramics, silicon oxide/nitride, polysilicon to name a few.

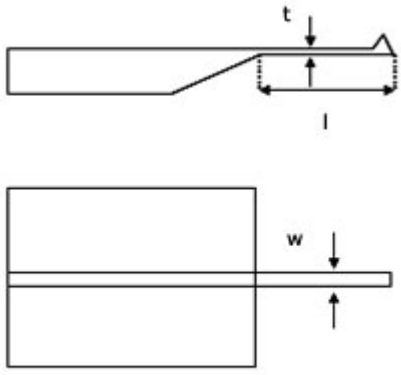
Tip Spec

	nominal	**range**
Shape	conical	
Tip radius (r)	2-3 nm	< 5 nm
Tilt compensation	13 deg	+/- 1 deg
Pyramid height (PH)	15 um	10–15 um
Tip set back (TSB)	15 um	5- 25 um



Cantilever Spec

	nominal	**range**
Type	TESP/NCH	
Shape	beam	
Force constant	42 N/m	27–75 N/m
Resolution frequency	320 kHz	270-350 kHz
length (i)	125 nm	115-135 nm
Width (w)	30 um	22–38 um
Thickness (t)	4 um	3–5 um



Coating

Tip side : none
Back side : 30 nm Al reflex

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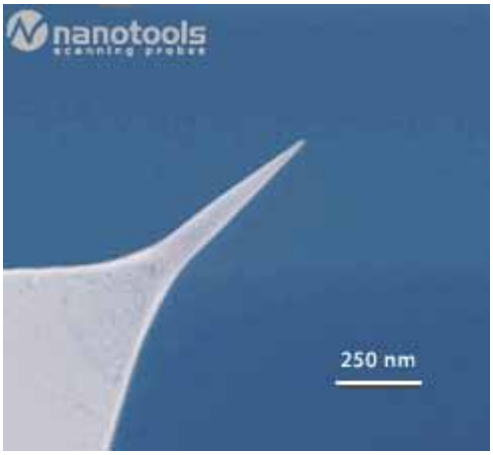
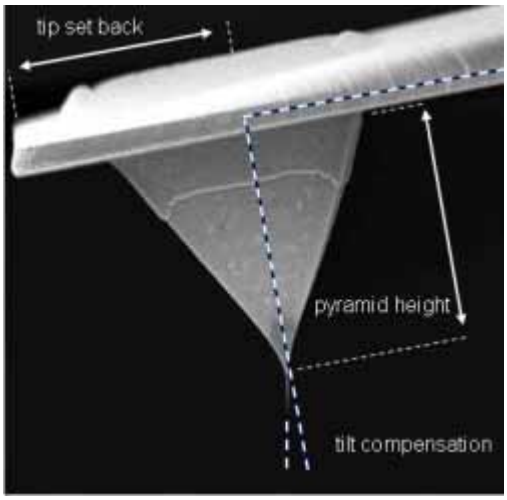
biotool_PNP_TR_10



The nanotools **EBD probe biotool** is specifically designed for biological applications. It is extremly **appropriate for small features** and compatible with both air and liquids. With this probe you get **true dimensions of fine structures** and **clear sidewall information.**

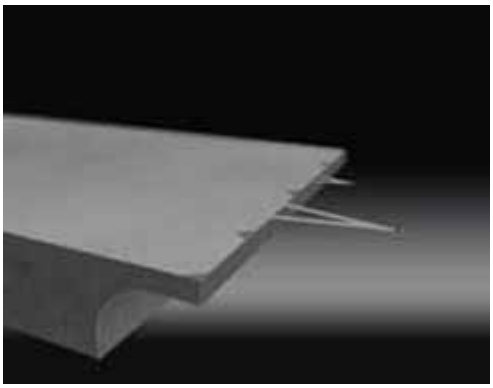
Tip Spec

	nominal	**range**
Shape	conical	
Tip length (r)	550 nm	+/- 250 nm
Tip radius (r)	< 5 nm	< 10 nm
Tilt compensation	10 deg	+/- 1 deg
Pyramid height (PH)	4 um	
Tip set back (TSB)	4 um	



Cantilever Spec

	nominal
Type	PNP_TR
Shape	triangle
Force constant	0.32 N/m
Resolution frequency	67 kHz
length (i)	100 nm
Width (w)	135 um
Thickness (t)	0.6 um



Coating

Tip side : none
Back side : 65 nm Au reflex

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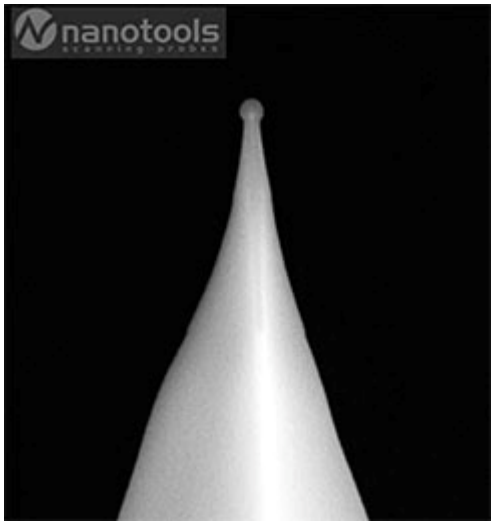
B1, B2, B50, B100, B150

This SPM probe offers a hemispherical, symmetric and extremely smooth hard tip side coating. This coating, made of EBD diamond like carbon, features extremely high wear resistance. The macroscopic tip radius of curvature is precise to +/- 5 nm of the nominal value.



	B1 (r: 10-25 nm)	B2 (r: 30-50 nm)	B50 (r: 50 nm +/- 10%)	B100 (r: 100 nm +/- 10%)	B150 (r: 150 nm +/- 10%)
NCHR l: 125 µm w:30 µm t: 4 µm k: 42 N/m f: 320 kHz	B1_NCHR	B2_NCHR	B50_NCHR	B100_NCHR	B150_NCHR
FMR l: 225 µm w: 28 µm t: 3 µm k: 2.8 N/m f: 75 kHz	B1_FMR	B2_FMR	B50_FMR	B100_FMR	B150_FMR
CONTR l: 450µm w: 50 µm t:2 µm k: 0.2 N/m f: 13 kHz	B1_CONTR	B2_CONTR	B50_CONTR	B100_CONTR	B150_CONTR

Coating / Tip Shape

Tip shape : hemispherical

Tip side : none

Back side : 30 nm Al reflex

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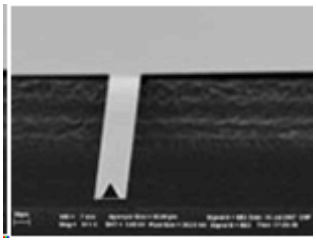
Diamond AFM Probes

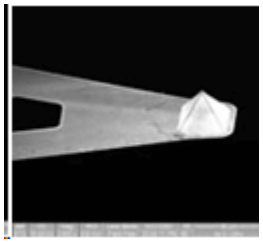
주요 특징들

- Si 와 SiN AFM Probe 보다 100 배 이상의 마모율을 가지고 있습니다.
- Si 또는 SiN AFM Probe 보다 훨씬 탁월한 안정성을 가지고 있습니.
- 20nm 에서 30nm 사이 탐침반경. 실제 측정결과 20nm 이상의 분해능.
- 낮은 표면에너지는 부드럽고 점착성이 있는 물질의 측정을 보다 탁월하게 합니다.
- 낮은 마찰계수는 측정하는 동안 시료의 손상을 억제합니다.

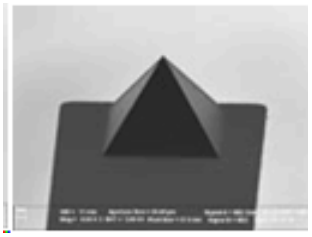
NaDia All Diamond AFM Probe 의 캔틸레버와 탐침 모양

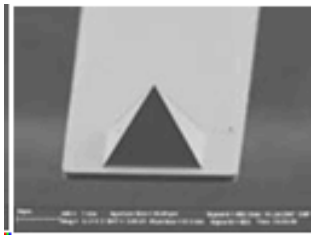


Rectangular Cantilever

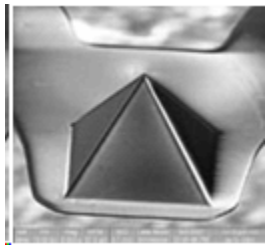


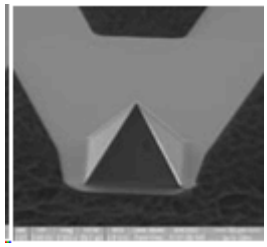
Triangular Cantilever



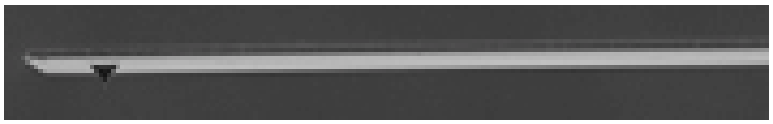


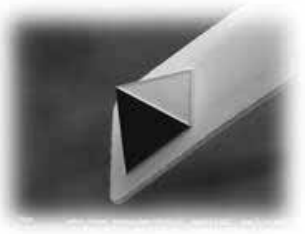
Rectangular tip





Triangular tip





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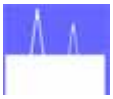
NaDia All Diamond AFM Probe 제품별 주요사양

ND-CTC Series : Conductive All Diamond Probe

Tip		**Cantilever**	
Shape	(111) Pyramid	Tip Setback	9 um
Height	5.66 um	Coating	60 nm reflective aluminum coating
Radius	15 - 30 nm (nominal)	Curvature	Typically less than 3 degrees
Material	Conductive UNCD	Curvature	Standard size Pyrex (3.6 x 1.5 x 0.5 mm)

Model	Chip Image	Cantilever	Force Constant (N/m)	Frequency (kHz)	Length (um)	Width (um)	Thickness (um)
ND-CTCR1-2		Short Medium Long	0.35 0.17 0.04	35 17 12	225 325 425	30 40 20	1 1 1
ND-CTCR2-2		Short Medium Long	0.23 0.08 0.05	40 12 8	225 425 500	20 40 40	1 1 1
ND-CTCT1-2		Short Long	1.28 0.46	48 24	200 300	25 41	1 1
ND-CTCT2-2		Short Long	0.71 0.04	50 23	200 300	17 23	1 1

ND-DYI Series : Dynamic Mode All Diamond Probe

Tip		**Cantilever**	
Shape	(111) Pyramid	Tip Setback	9 um
Height	5.66 um	Coating	60 nm reflective aluminum coating
Radius	15 - 30 nm (nominal)	Curvature	Typically less than 3 degrees
Material	UNCD	Curvature	Standard size Pyrex (3.6 x 1.5 x 0.5 mm)

Model	Cantilever	Force Constant (N/m)	Frequency (kHz)	Length (um)	Width (um)	Thickness (um)
ND-DYIRS-4	1 Cantilever per chip	34	310	120	33	2.5
ND-DYIRL-4	1 Cantilever per chip	28	240	130	33	2.5

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ND-CTI Series : Contact Mode All Diamond Probe

Tip		**Cantilever**	
Shape	(111) Pyramid	Tip Setback	9 um
Height	5.66 um	Coating	60 nm reflective aluminum coating
Radius	15 - 30 nm (nominal)	Curvature	Typically less than 3 degrees
Material	Conductive UNCD	Curvature	Standard size Pyrex (3.6 x 1.5 x 0.5 mm)

Model	Chip Image	Cantilever	Force Constant (N/m)	Frequency (kHz)	Length (um)	Width (um)	Thickness (um)
ND-CTIR1-4		Short Medium Long	0.35 0.17 0.04	35 17 12	225 325 425	30 40 20	1 1 1
ND-CTIR2-4		Short Medium Long	0.23 0.08 0.05	40 12 8	225 425 500	20 40 40	1 1 1
ND-CTIT1-4		Short Long	1.28 0.46	48 24	200 300	25 41	1 1
\ ND-CTIT2-4		Short Long	0.71 0.04	50 23	200 300	17 23	1 1

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