10 nm MCNT

Provided with **TrueDimensions™**
Online access to key probe parameters for every individual tip

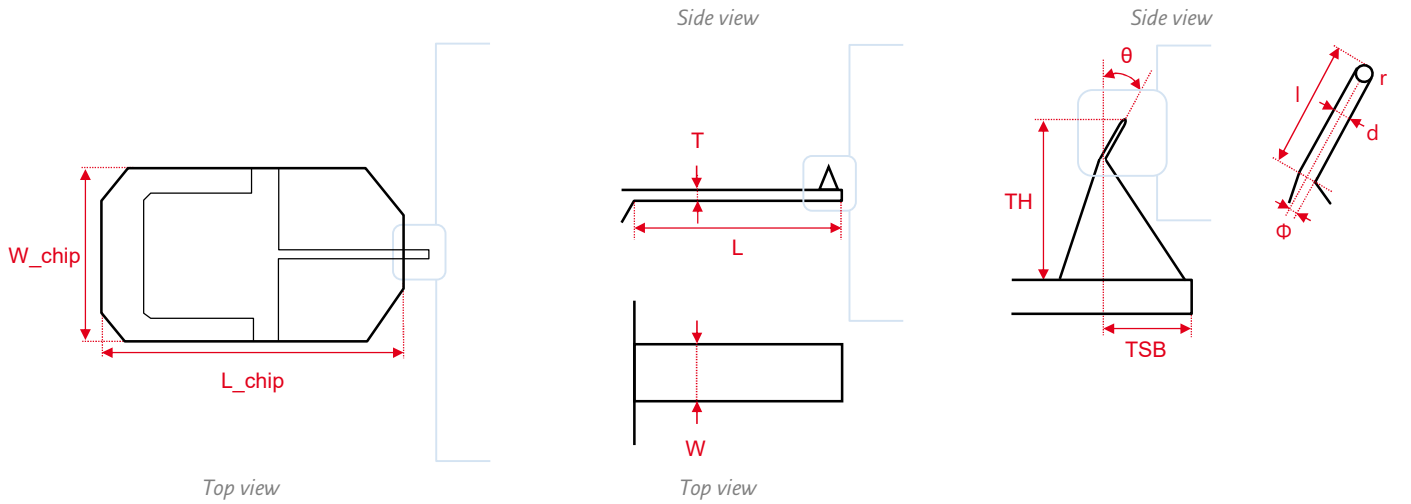
	MCNT-100™		MCNT-150™	
Part number	**NT_CNT100_v0010**		**NT_CNT150_v0010**	
Tip				
Material	HDC/DLC		HDC/DLC	
Length / l	100 nm	(±20 nm)	150 nm	(140-150 nm)
Width / d	10 nm [1]	(±2 nm)	10 nm [2]	(±2 nm)
Half cone angle / Φ	n/a		n/a	
Sharpness (radius) / r	2 nm	(<5 nm)	2 nm	(<5 nm)
Tilt compensation / θ	3°	(±0.5°)	3°	(±0.5°)
Total tip height / TH	15 µm	(10-15 µm)	15 µm	(10-15 µm)
Tip set back / TSB	15 µm	(5-25 µm)	15 µm	(5-25 µm)
Cantilever				
Material	Si		Si	
Shape	NT-RTESPA		NT-RTESPA	
Length / L	120 µm	(±5 µm)	120 µm	(±5 µm)
Width / W	30 µm	(±2 µm)	30 µm	(±2 µm)
Thickness / T	4.4 µm	(±0.5 µm)	4.4 µm	(±0.5 µm)
Force constant [3] / k	40 N/m	(±20 N/m)	40 N/m	(±20 N/m)
Resonance frequency [3] / f	320 kHz	(±50 kHz)	320 kHz	(±50 kHz)
Tip side coating	none		none	
Back side coating	reflex		reflex	
Chip				
Length / L_chip	3400 µm		3400 µm	
Width / W_chip	1600 µm		1600 µm	
Thickness / T_chip	315 µm		315 µm	

Also available

Type	l	d	θ	Part number
MCNT-100™ 12 deg	100 nm	10 nm	12°	NT_CNT100_v0050
MCNT-150™ 12 deg	150 nm	10 nm	12°	NT_CNT150_v0040
MCNT-300™	300 nm	18 nm	3°	NT_CNT300_v0010
MCNT-300™ 12 deg	300 nm	18 nm	12°	NT_CNT300_v0030
MCNT-400™	400 nm	22 nm	3°	NT_CNT400_v0010
MCNT-400™ 12 deg	400 nm	22 nm	12°	NT_CNT400_v0030
MCNT-500™	500 nm	30 nm	3°	NT_CNT500_v0010
MCNT-500™ 12 deg	500 nm	30 nm	12°	NT_CNT500_v0030

- **Consistent shape**
- **Controlled orientation**
- **Carbon durability**

[1] measured at 70 nm from tip apex | [2] measured at 100 nm from tip apex | n/a: specification not applicable for this product
[3] Resonance frequency f extracted from LDV measurements; cantilever stiffness k calculated from the (measured) cantilever geometry. Actual values of >90% of all probes are guaranteed to be within the specified range.



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2020-01-R007