Critical Dimension re-entrant tip

These tips are widely used in Bruker’s X-3D and Insight - Systems.

Typical application of CDR - Tips are measurements of:

- line width,
- trench width,
- side wall roughness,
- slope angle,
- trench depth, and
- step height

Tip Apex Specifications

Type	Tip width [nm]	Overhang [nm]	Effective length [nm]
CDR 850	650 - 850	100 - 150	5000 - 7500
CDR 300	200 - 300	13 - 25	1000 - 1500
CDR 130 S	110 - 140	13 - 25	250 - 350
CDR 120	100 - 130	5 - 15	500 - 700
CDR 70	57 - 70	5 - 11	450 - 550
CDR 70 S	57 - 70	5 - 11	350 - 450
CDR 50	40 - 50	5 - 8	250 - 350
CDR 50 S	40 - 50	5 - 8	190 - 260

CDR 32	27 - 32	3 - 5	180 - 220
CDR 32 S	27 - 32	3 - 5	130 - 180

The "C" in the ordering code denotes carbon coating for improved wear characteristics.

Please let us know if you have special needs for tip width, overhang, or effective length.

Each probe is individually quality inspected by imaging in a SEM. A certificate with measurement values and images will be provided (a sample can be found in the document section).

CDR probes are shipped in packs of 5 tips.

Probe tip, cantilever, and holder chip consist of single crystal silicon.

Each chip is uniquely numbered.

All cantilevers are shipped with Al-reflex coating.

All probe tips are SEM quality inspected prior to shipment (micrographs upon request).

General Specifications

Cantilever dimensions	length = 125 (± 15) µm width = 35 (± 3) µm
Typical stiffness:	40 N/m

Resonant frequency:	300 (± 95) kHz
Holder chip dimensions	length = 3.40 mm width = 1.55 mm thickness = 0.32 mm

CDR-Auswahl:	please choose,850,300,130 S,130 SC,120,70,70 S,50,50 C,50 S,50 SC,32 ,32 S,32 C,32 SC
CDR-SEM:	with SEM,no SEM