

IVPS100-PTB - Improved Vertical Parallel Structure

Tip width characterizer with an array of 5 lines, line width varying from 50 nm to 130 nm in steps of 20 nm.

Designed in collaboration with Physikalisch Technische Bundesanstalt, Braunschweig, Germany.

Specifications

Material	Silicon
Width of line	increasing from 50 nm to 130 nm in steps of 20 nm actual linewidth is delivered for each chip
Pitch	500 nm \pm 10nm
Depth of line	$\sim 1 \mu\text{m}$
Surface/sidewall angle	$< 90^\circ \pm 0,5^\circ$
Sidewall parallelity	$< 1^\circ$
Top corner radius	$< 10 \text{ nm}$

Probe tip characterizers are used to check the shape and the dimension of the probe tip.

Each cell is numbered, which facilitates recalibration at the identical position.

Layout:

4 quadrants with 25 cells each, on 6 x 6 mm silicon chip

