

PLANOTEC TEST SPECIMEN

Product No. 615 Series Wafer #E8433-04

DESCRIPTION:

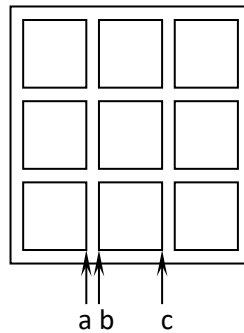
The Planotec Test Specimen is used for magnification calibration and image distortion check for both SEM or Reflected Light Microscopy. This test specimen consists of a square pattern of lines etched into a single crystal of Silicon 5mm x 5mm with a thickness of 675 μm. The squares repeat every 10μm (.01mm). They have been written by electron beam lithography. The dividing lines are etched approximately 1.9μm wide and 300nm deep. A square mesh of wider lines of 0.5 mm spacing occurs every 50 lines, which is useful for light microscopy. The repeated length of the structure has a guaranteed accuracy of 1%, except for the width of the etched bars. The line width may vary; furthermore, its pitch measurement is critical because of the slopes.

Orientation: <100>

Wafer Type: P-Type/Boron Doped

Resistance: 1-30 ohm-cm

Measurement Statistics:



No	Pitch a-c (nm)	Line a-b (nm)
1	9980.6	1962.1
2	9987.1	1961.8
3	9977.7	1964.3
4	9979.5	1959.0
5	9970.3	1973.6
6	9980.7	1959.5
7	9975.5	1961.9
8	9970.2	1957.7
9	9985.5	1964.9
10	9978.1	1959.2
11	9983.7	1960.8
12	9980.0	1956.3
13	9975.5	1956.5
Mean	9978.8nm	1973.8nm
Δ	16.9nm	17.3nm
3Σ	15.4	13.7