

Nanopatterned Silicon Stamps

II-VI offers a large variety of nanomachined single crystal silicon substrates providing a low-cost entry into nanophotonics research for industry and academic institutions. The substrates may be used in a variety of applications in optics, photonics, biology, chemistry, physics (e.g. neutron scattering), polymer research, nanoimprinting, microfluidics and others. If desired, the substrates can be coated with metallic or dielectric coating.

Most of the surface features have slightly trapezoidal cross-section profiles with straight

parallel mesas and trenches. Lattice-like structures are available as well. A number of feature sizes and trench depth is available. SEM images of the substrates may be taken prior to shipment to verify the exact profile.

Dimensions shown in the table represent target value. Period has accuracy better than 0.5% while groove depth and the width of line and space may differ from the target values by 15%. SEM are given for illustration purposes. If more precise dimensional information is required, we may provide an SEM of the specific piece of nanostamp you order as an optional service

