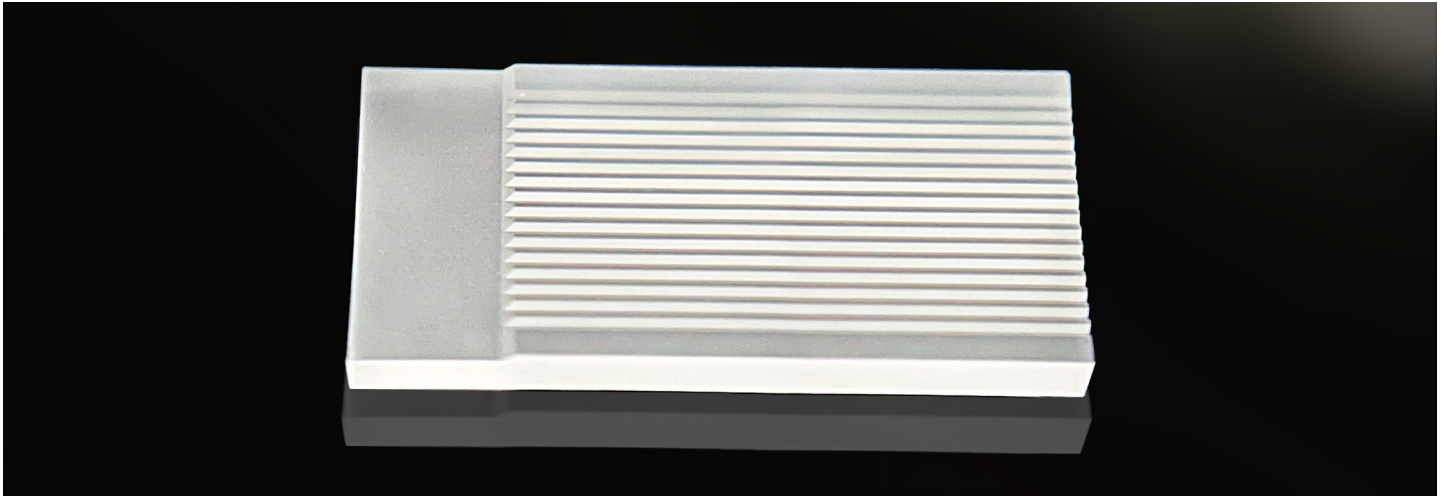


# V-Groove Arrays

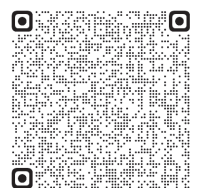


## Features

- High accuracy and consistency – Accumulative pitch tolerance within  $\pm 1\mu\text{m}$  for 96CH
- Variable V-grooves with new levels of flexibility – allowing different pitches and angles to be implemented within the same array
- Integrated mechanical positioning support
- Compatible pitch alignment with corresponding microlens arrays
- Fully customizable V-Groove patterns, including concave and convex designs
- Ideal for flexible, multiple channel designs and large-scale production

## Application Scenarios

Optical modules, fiber connectors, PLC splitters in FTTX networks, AWGs in WDM systems, and further multi-channel scenarios



[Learn More](#)

# V-Groove Arrays

## Key Specifications

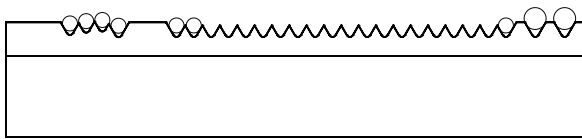
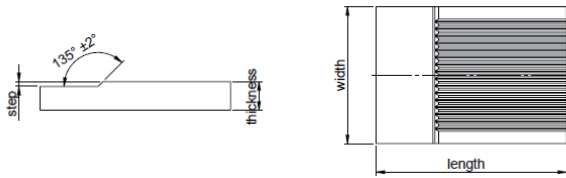
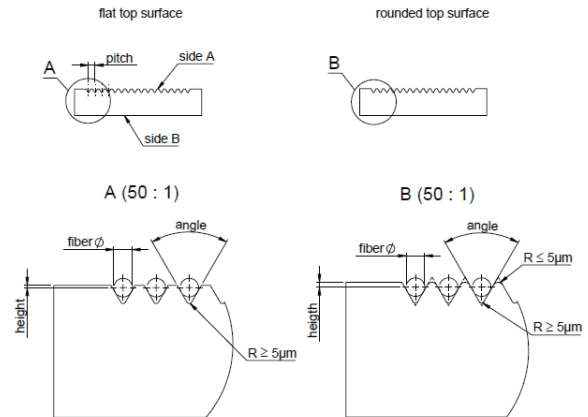


Illustration of complex design examples only. Please contact us for technical support on your configuration.



Material	Borofloat 33, Fused Silica, S-TIH53, S-BSL7 (and equivalent such as N-BK7), Si Ceramics and other non-toxic optical glasses on request
Length / Width	0.4 – 300 mm ± 0.025 mm (typ.)
Thickness Tolerance	± 0.05 mm (typ.)
Step	≥ 0.1 mm ± 0.02 mm (typ.)
Groove Depth (SAG)	Fully customizable without limitation
Height Tolerance	± 0.002 mm (typ.) **
Groove Pitch	0.127mm, 0.250mm or customized, single pitch tolerance *** ± 350 nm
Straightness of Fiber Centers Points	≤ 500nm (typ.)
Number of Channels	Up to 96, or customized, > 96 on request
Groove Angle	≥ 60° (typ.), 90° or customized (typ. tolerance ≤ 2°)
Edge Chipping	≤ 0.1mm for outer dimensions; minimized in functional structure by “no sharp edges” design

### Notes:

- \* Parameters are influencing each other – please contact us for further information or exceeding specifications.
- \*\* Scattering of the height deviations of the fiber centers in relation to an edge
- \*\*\* Specification for single pitch error or from V-groove to V-groove.