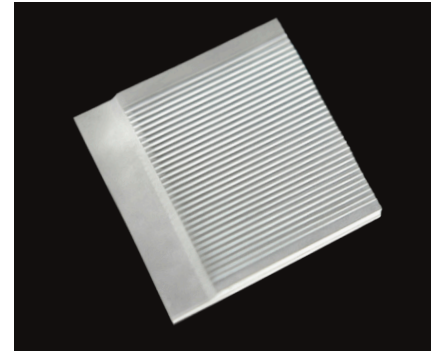


Engineered V-Groove Arrays

Features

- **Excellent positioning performance:** Accumulative (first-to-last) fiber spacing error can be < 500 nm for 48CH, 96CH or higher, enabled by processing all V-Grooves over the whole width of wafers at the same time.
- **New flexibility level:** Advanced V-Groove structuring supports simultaneous manufacturing of different pitches and groove shapes (V, U, convex, concave, freeform) within the same array.
- **Integrated mechanical positioning features available:** Enables passive alignment and precise assembly.



Application Scenarios

Optical modules, fiber connectors, low loss PIC connectors and further multi-channel scenarios



[Learn More](#)

Key Specifications

Key Specifications	Standard Accuracy Version	High Accuracy Version
Ideal Positioning Accuracy (X/Y Directions, by means of inlayed fiber core mid-point)	X < 500 nm, Y < 750 nm	X < 250 nm, Y < 350 nm
Pitch (Spacing) Accuracy, Fiber-to-Fiber	< 500 nm	< 200nm
Accumulative Pitch (Spacing) Accuracy, First-to-Last	< 1000 nm	< 500 nm
Line Straightness	< 1500 nm	< 700 nm
Sidewall Verticality	90° ± 0.3°	90° ± 0.3°
V-Groove Angle	60° / 90° standard, or customizable	
Pitch (Spacing) Fiber to Fiber in X Direction	0.127 mm, 0.250 mm or customized; various pitches on the same product realizable	
Number of Channels	From 8, 16, 32, 48, 96, 128, or customized	
Surface Roughness (Ra)	< 0.2 µm	< 0.02 µm
Material Options	Borofloat 33, Fused Silica, S-TIH53, S-BSL7 (and equivalent such as N-BK7), Silicon and other non-toxic optical glasses on request	

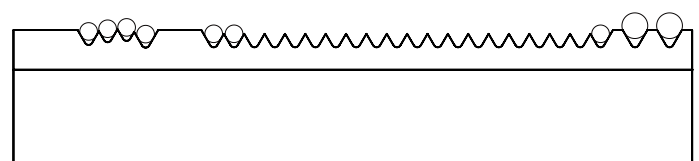
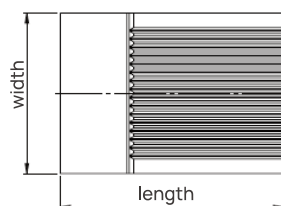
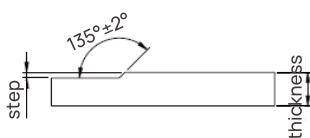


Illustration of complex design examples only.
Please contact us for technical support on your configuration.