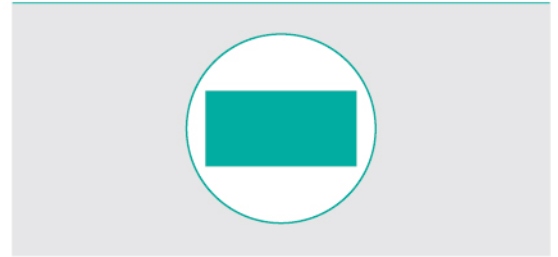


# Rectangular Core Fiber

Everfoton's Rectangular Core Fiber utilizes an innovative structural design and advanced processing techniques to precisely control the beam propagation mode. It enables the direct output of high-uniformity non-circular beam profiles such as square and rectangular shapes, while maintaining high transmission efficiency and excellent compatibility with conventional fibers. This fiber significantly reduces the integration difficulty and complexity of spatial beam shaping systems, enabling efficient integration into flexible links for applications in laser cleaning, illumination, heating, measurement, medical and other fields.



## Characteristics

- Tight geometric tolerances and precise chamfer control
- Excellent geometry and consistency
- Uniform power/energy distribution across core area
- Customizable beam profiles

## Applications

- Laser cleaning
- Laser illumination
- Laser heating
- Laser measurement
- Medical
- Any applications requiring flat-top beam transmission over a flexible link

## Specifications

Fiber Type	SI 50*150/230-22/380(DC)	SI 100*200/400-15/540 (DC)	SI 100*300/460-22/600 (DC)
Part No.	SI2118-L	SI2118-J	SI2118-I
<b>Optical Properties</b>			
Operating Wavelength (nm)	500-1200		
Core NA	0.22± 0.02	0.15±0.02	0.22± 0.02
Inner Cladding NA	≥0.46	≥0.46	≥0.46
<b>Geometrical Properties</b>			
Core Short Side Length(μm)	50.0±3.0	100.0±5.0	100.0±5.0
Core Long Side Length(μm)	100.0±15.0	200.0±10.0	300.0±15.0
Cladding Diameter (μm)	230.0±10.0	400.0±10.0	460±10.0
Coating Diameter (μm)	380.0±20.0	540.0±20.0	600±20.0
<b>Material Properties</b>			
Core Material	Pure Silica	Pure Silica	Pure Silica
Cladding Material	Fluorine-doped Silica	Fluorine-doped Silica	Fluorine-doped Silica
Inner Coating Material	Low Refractive Index Coating	Low Refractive Index Coating	Low Refractive Index Coating
Outer Coating Material	Acrylate	Acrylate	Acrylate
<b>Mechanical Properties</b>			
Proof Test (kpsi)	≥100	≥100	≥100