

Square Core Fiber

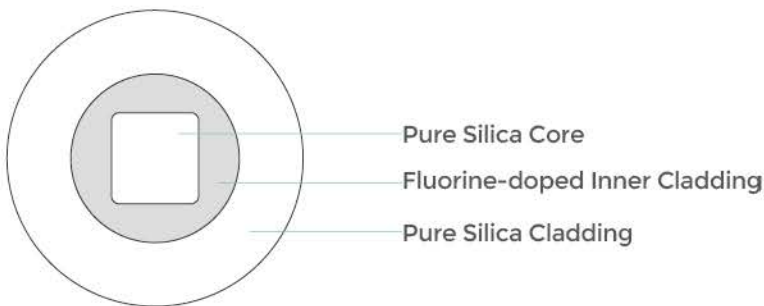
Everfoton square core fiber is designed to meet special beam shaping requirements. Compared to a circular fiber profile, square-core fiber allows a more uniform treatment of the material-particularly in welding technology and heat treatment, as the beam moves laterally over the material's surface.

Characteristics

- Perfect fiber geometries and low transmission loss
- Standard symmetrical square shape with adjustable square core corner radius
- Homogeneous beam output of the square core
- Customized shape and size requirements

Applications

- Coupled transmission required by special beam shapes
- High-power laser transmission
- Square diode laser and detector connected
- Imaging and medicine



Specifications

Fiber Type	SI 50*50/100/250-12/400(DC)	SI 200*200/400-22/540(DC)	SI 400*400/740-22/910(DC)
Part No.	SI2118-B	SI2118-A	SI2118-C
Optical Properties			
Profile Structure	Triple Cladding SI	Double Cladding SI	Double Cladding SI
Core NA	0.12 ± 0.02	0.22 ± 0.02	0.22 ± 0.02
Inner Cladding NA	≥ 0.46	≥ 0.46	≥ 0.46
Cladding Attenuation @1095nm (dB/km)	≤ 15	≤ 15	≤ 15
Geometrical Properties			
Side Length of Core(μm)	50.0 ± 3.0	200 ± 6.0	400.0 ± 8.0
Inner Cladding Diameter(μm)	100.0 ± 5.0	-	-
Cladding Diameter(μm)	250.0 ± 5.0	400 ± 10.0	740.0 ± 10.0
Coating Diameter(μm)	320.0 ± 15.0	540.0 ± 10.0	910.0 ± 10.0
Material Properties			
Proof Test (kpsi)	≥ 100	≥ 100	≥ 100
Inner Coating Material	Low Refractive Index Coating	Low Refractive Index Coating	Low Refractive Index Coating
Outer Coating Material	Acrylate	Acrylate	Acrylate