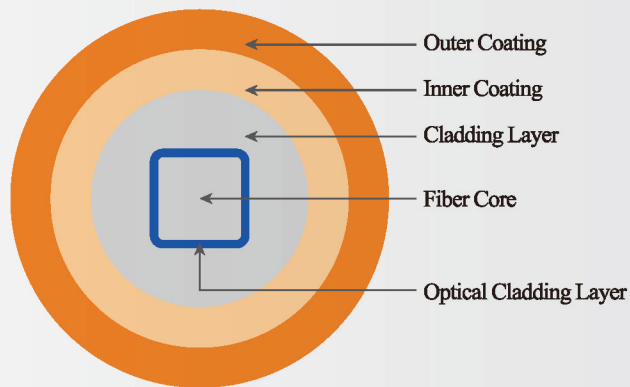


Square Core Fiber

Product Description

YOEC square core fiber is a kind of large core diameter laser energy transfer fiber with special structure, which is mainly used in the fields of laser high power transmission, homogenization, imaging, spectroscopy and so on. Its structure includes square high purity synthetic quartz core, fluorine doped quartz cladding and coating. The typical NA values of core and cladding are 0.12 and 0.22. Square core fiber can significantly improve the coupling efficiency with semiconductor laser, has excellent spot homogenization effect and shaping function, and has a strong advantage in the field of laser cleaning and laser beam shaping.

Optical Fiber Structure



Product Application

- Laser beam assembly
- Laser coupling
- Beam homogenization
- Laser cleaning

Product Features

- Good geometric uniformity
- High damage threshold
- The intensity distribution of mode field is uniformed

Product Specification (I)

Properties	Unit	Product Specification		
Product Specification	/	SCF100-12-500L	SCF200-12-400L	SCF400-12-740L
Optical Properties				
Numerical Aperture	/	0.12 ± 0.02	0.12 ± 0.02	0.12 ± 0.02
Attenuation @1064nm	dB/km	≤ 17.0	≤ 17.0	≤ 17.0
Refractive Index Structure	/	Step type	Step type	Step type
Geometric Properties				
Edge Length Of Core Layer	μm	100.0 ± 5.0	200.0 ± 6.0	400.0 ± 8.0
Outer Cladding Diameter	μm	500.0 ± 10.0	400.0 ± 10.0	740.0 ± 10.0
Coating Diameter	μm	630.0 ± 10.0	540.0 ± 10.0	910.0 ± 10.0
Core Material	/	Pure quartz		
Inner Coating Material	/	Low refcoilent coating		
Outer Coating Material	/	Acrylic resin		
Mechanical Properties				
Tension Screening	kpsi		100	

Product Specification (II)

Properties	Unit	Product Specification		
Product Specification	/	SCF100-22-500L	SCF200-22-400L	SCF400-22-740L
Optical Properties				
Numerical Aperture	/	0.22 ± 0.02	0.22 ± 0.02	0.22 ± 0.02
Attenuation @1064nm	dB/km	≤ 17.0	≤ 17.0	≤ 17.0
Refractive Index Structure	/	Step type	Step type	Step type
Geometric Properties				
Edge Length Of Core Layer	μm	100.0 ± 5.0	200.0 ± 6.0	400.0 ± 8.0
Outer Cladding Diameter	μm	500.0 ± 10.0	400.0 ± 10.0	740.0 ± 10.0
Coating Diameter	μm	630.0 ± 10.0	540.0 ± 10.0	910.0 ± 10.0
Core Material	/	Pure quartz		
Inner Coating Material	/	Low refcoilent coating		
Outer Coating Material	/	Acrylic resin		
Mechanical Properties				
Tension Screening	kpsi		100	

Customized Information

- Other geometric sizes of plastic clad large core diameter optical fiber products can be provided according to customer requirements.