

Hexagonal Microstructured Optical Fiber for Supercontinuum White Light Source

Core Diameter: $5.0 \pm 0.3 \mu\text{m}$



● Product Description

Supercontinuum white light sources are based on the broadening of pulse spectrum produced by nonlinear effects. Compared with other materials or ordinary optical fibers, the microstructured optical fiber designed by us for supercontinuum white light sources has excellent dispersion adjustment ability and can obtain efficient optical frequency conversion. The light source system can be widely used in spectral analysis, optical fiber testing, sensing and other fields.

● Part Number

MOF_SC_SCP5/150/270

● Product features

High-temperature resistance 、 Durability, high bending strength, and sealing

performance 、 Enables the welding of embedded optical fibers, fiber bundles, and pigtails into high-vacuum environments

● Application area

High-temperature environments 、 Harsh chemical environments 、 Nuclear radiation environments 、 High-power laser transmission 、 Medical applications 、 Optical fiber bundle welding 、 Material characterization, spectral analysis 、 Confocal imaging, optical coherence tomography 、 Biological application technology research, flow cytometer

Parameters

Spec

PN#	MOF_SC_SCP5/150/270
Core Diameter:	$5.0 \pm 0.3 \mu\text{m}$
Microstructure Period:	$3.3 \pm 0.1 \mu\text{m}$
Zero scatter point:	$1.06 \mu\text{m}$ customizable
Cladding diameter:	$150 \pm 3 \mu\text{m}$
Coating diameter:	$270 \pm 3 \mu\text{m}$
Material:	Pure quartz
Coating material:	Polyimide/acrylic resin
Screening intensity:	100 kpsi
Microstructure Air Hole Diameter:	$1.6 \pm 0.1 \mu\text{m}$

Geometric

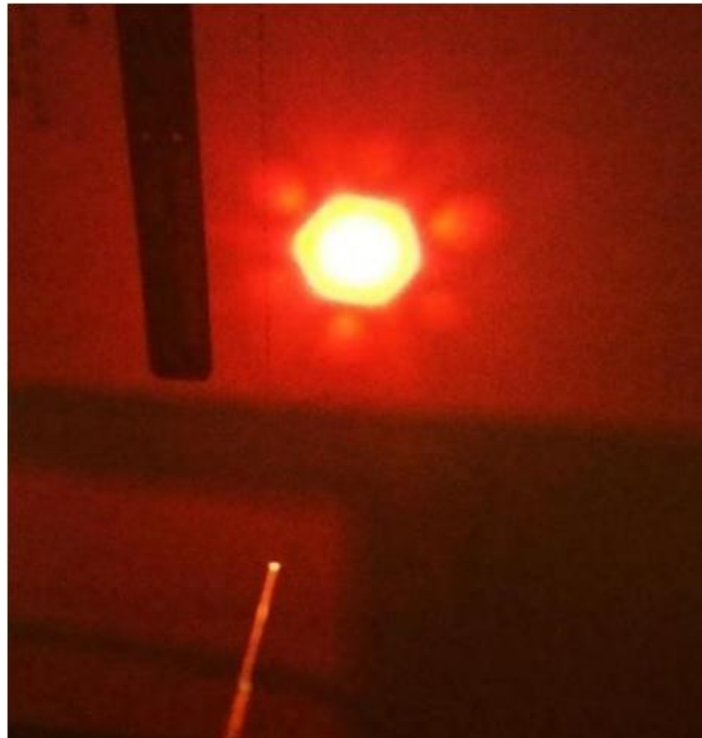
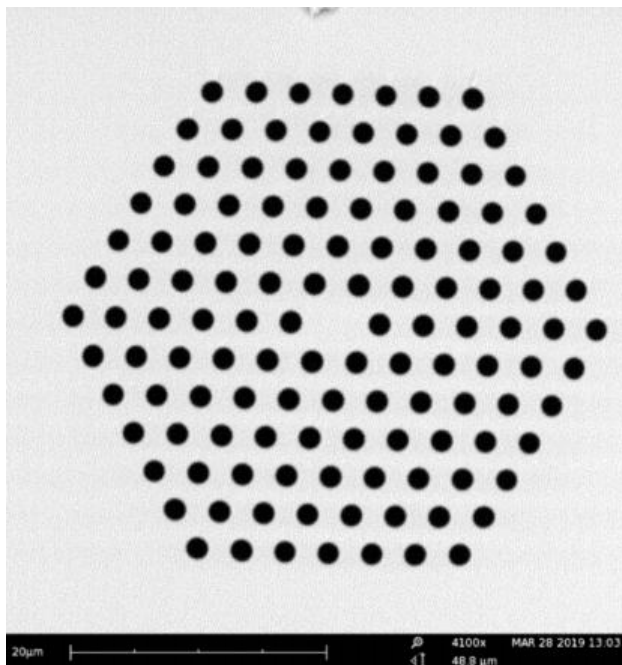
Delivery length:	1 - 500 m
Cladding diameter:	$150 \pm 1 \mu\text{m}$
Coating diameter:	$270 \pm 5 \mu\text{m}$
Core cladding concentricity	$\leq 3 \mu\text{m}$
Cladding non-circularity	≤ 0.5
Screening intensity:	100 kpsi

Light source system

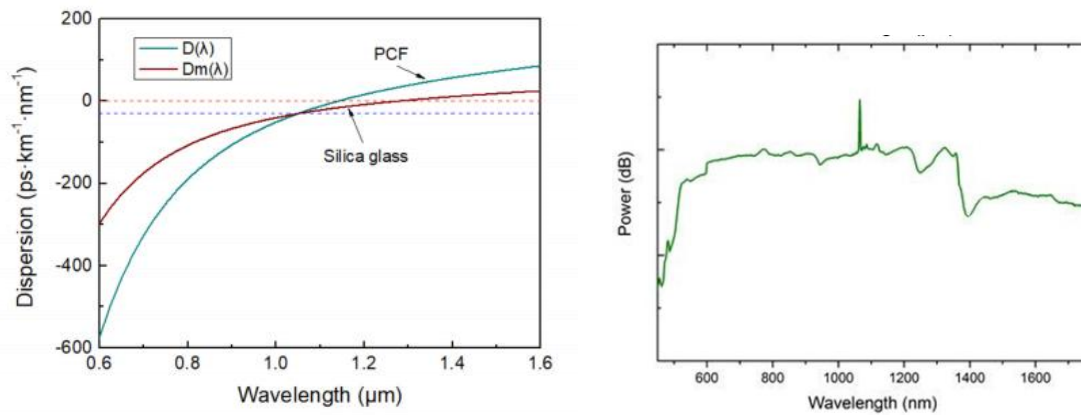
	Supercontinuum light source
Repetition rate:	15~30 kHz
Spectral broadening:	450~2400 nm

Total output power:	$> 200 \text{ mW}$
Pulse width:	$< 2 \text{ ns}$
Beam quality TEM00:	$M^2 < 1.1$

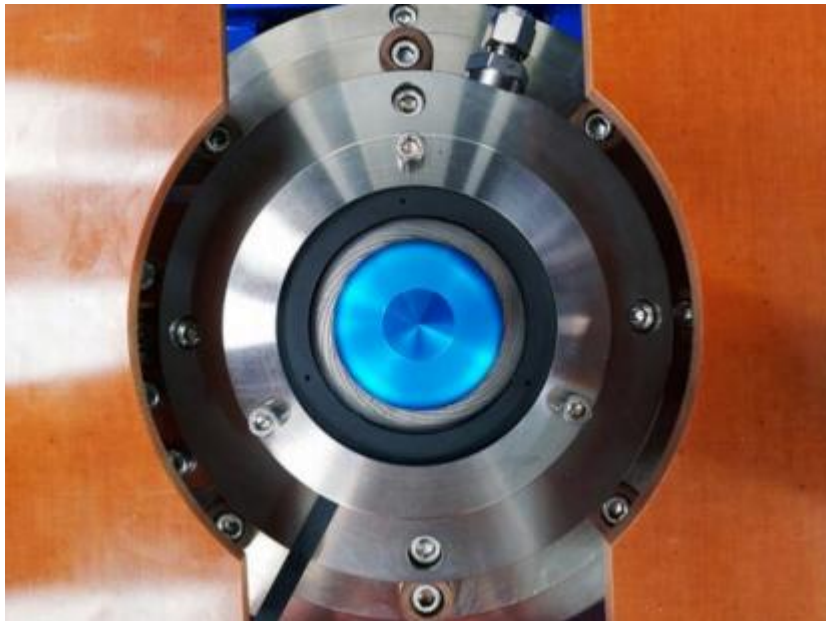
Structure



Super continuum Spectrum Generation Microstructured Optical Fiber and Its Dispersion Curve



Manufacturing Platform



Ordering info

PN#MCS1550 Hexagonal Microstructured Optical Fiber for Supercontinuum White Light Source