

Photonic Crystal Fiber SC-PCF-01

Description:

This single-mode nonlinear photonic crystal fiber offers a high nonlinear coefficient with zero dispersion around 1030nm to allow efficient nonlinear interactions with 1064 nm pump lasers. The fiber is designed to convert 1064nm ultra-short pulse laser source into a low-cost, ultra-bright supercontinuum source. It can be spliced to standard single mode fiber or endlessly single mode fiber. Hermetically sealed end is available upon request. Optional FC/PC connectors.

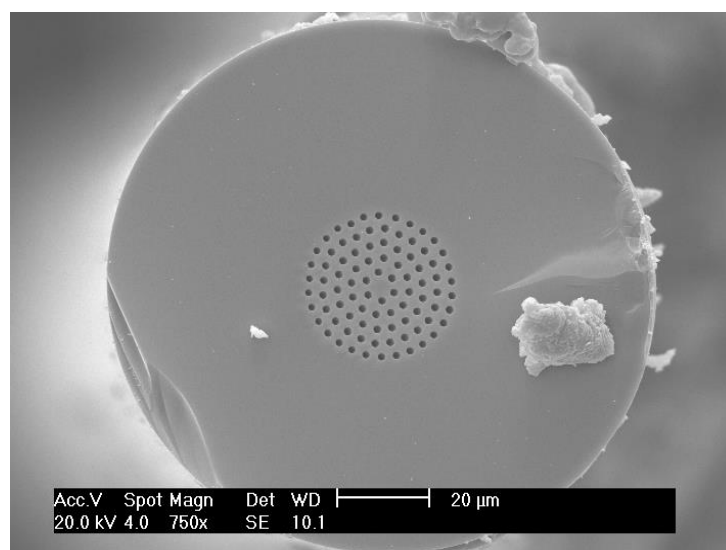
Key Features:

- Zero dispersion near 1 μ m
- High nonlinear effects
- Single mode operation
- Robust against bends

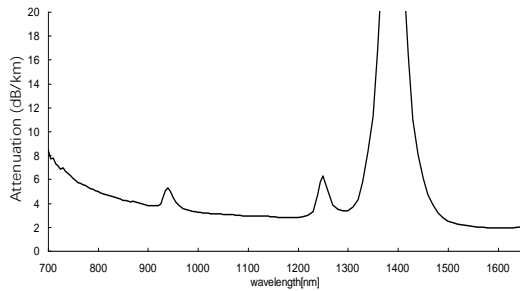
Applications:

- Broadband continuum generation
- Spectroscopy and microscopy
- Metrology
- Optical coherence tomography

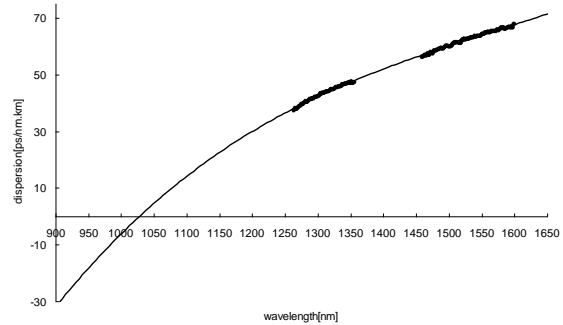
Cross section view:



Typical Attenuation spectrum:



Calculated Dispersion:



Specifications :

OPTICAL PROPERTIES	
Zero dispersion wavelength	1030±20nm
Cut-off wavelength	<1000nm
Nonlinear coefficient @1060nm	11 (W·km) ⁻¹
Attenuation @ 800nm	<5 dB/km
Attenuation @ 1000nm	<3.2 dB/km
Attenuation @ 1060nm	<3.0 dB/km
Attenuation @ 1550nm	<2.1 dB/km
Mode Field Diameter @ 1060nm	3.6 ±0.1 μm
PHYSICAL PROPERTIES	
Material	Pure silica
Core diameter	4.6±0.2 μm
Cladding diameter	124±2 μm
Coating diameter	245±5 μm
Coating material	Acrylate