

NL-1050-ZERO-2

Nonlinear Photonic Crystal Fiber

- Small mode field area
- High nonlinear coefficient
- Flat near zero dispersion

Photonic crystal fibers use a microstructured cladding region with air holes to guide light in a pure silica core, giving rise to novel functionalities.

This highly nonlinear photonic crystal fiber benefits from a special core design to obtain a parabolic dispersion curve.

The fiber is available spliced to standard single mode fiber.

Applications

- Supercontinuum generation
- Optical parametric amplification

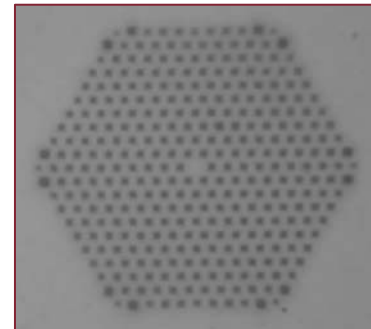
Physical properties

Material	Pure Silica
Cladding diameter	127 ± 5 μm
Coating diameter	245 ± 10 μm
Coating material, single layer	Acrylate
Core diameter	2.3 ± 0.3 μm

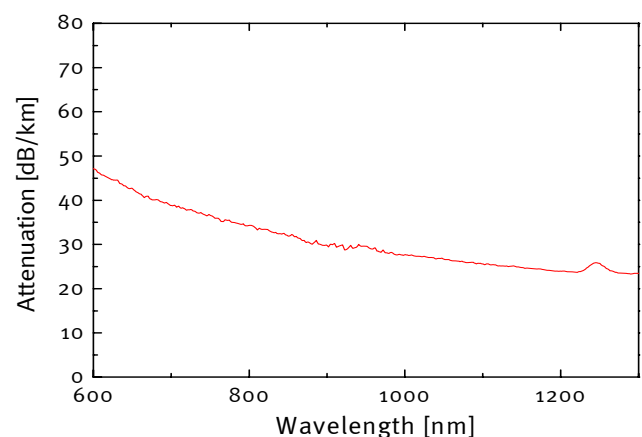
Optical properties

Dispersion @ 1025-1075 nm	< 4 ps/nm/km
Attenuation @ 1000-1100 nm	< 30 dB/km
Mode field diameter @ 1064 nm	2.2 ± 0.5 μm
Numerical aperture @ 1064 nm	~ 0.37
Nonlinear coefficient @ 1064 nm	~ 37 (Wkm) ⁻¹
Cut-off wavelength	< 300 nm
Splicing loss @ 980 nm	< 0.7 dB *

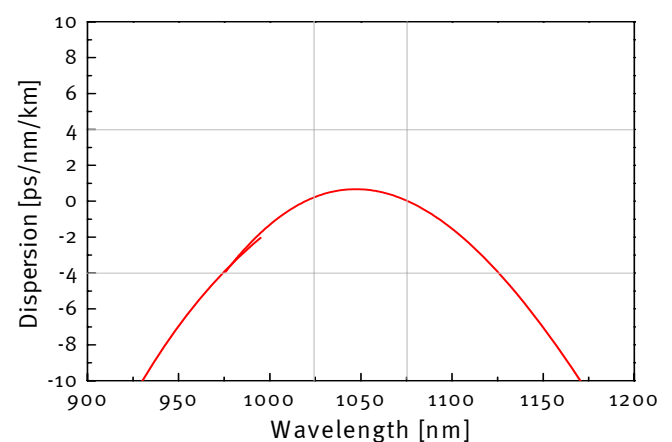
*Total splicing loss for splicing to standard fiber via an intermediate fiber



Typical spectral attenuation



Typical dispersion



NL-1050-ZERO-2-100409