

## SC-4.6-1000-46CB0

### Nonlinear fiber for supercontinuum generation

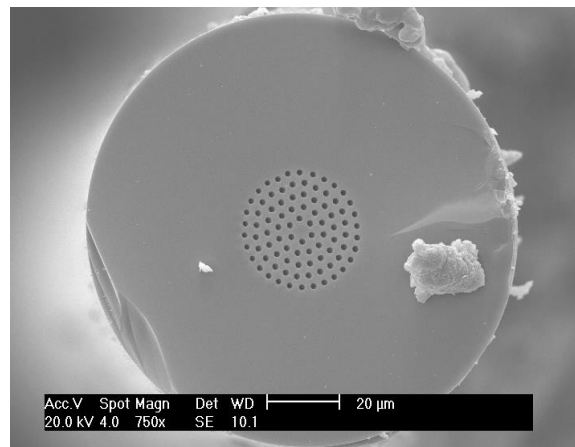
#### DESCRIPTION

This single-mode nonlinear photonic crystal fiber combines a high nonlinear coefficient with zero dispersion around 1040nm to allow efficient nonlinear interactions using 1064 nm range lasers.

The fiber is designed to convert passively Q-switched Nd<sup>3+</sup>-microchip lasers into a compact, low-cost, ultra-bright supercontinuum source.

The fiber is available spliced to standard single mode fiber or endlessly single mode fiber, and is also available with hermetically sealed ends and FC/PC connectors.

#### CROSS SECTION PHOTOGRAPH SAMPLE



#### ADVANTAGES

Dispersion optimized for 1μm wavelength pumping  
Single mode  
Bending insensitive

#### APPLICATIONS

Broadband continuum generation for:  
Spectroscopy and microscopy  
Metrology  
Optical coherence tomography, OCT

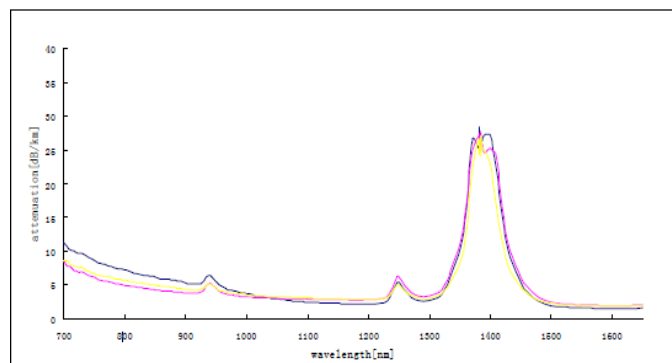
#### OPTICAL PROPERTIES

Zero dispersion wavelength: 1000 ±15nm  
Cut-off wavelength: < 1000 nm  
Nonlinear coefficient @ 1060 nm: 11 (W·km)<sup>-1</sup>  
Attenuation @ 1000nm: 3.2 dB/km  
Attenuation @ 1060 nm : 3.0dB/km  
Attenuation @ 1550 nm : 2.05 dB/km  
Attenuation @ 800 nm: 5dB/km  
Mode Field Diameter@1060nm: 3.6 ± 0.1 μm

#### PHYSICAL PROPERTIES

Material: Pure silica  
Cladding diameter: 119μm  
Coating diameter: 245 ± 5μm  
Coating material: Acrylate  
Core diameter: 4.6 ± 0.2μm

#### TYPICAL SPECTRAL ATTENUATION



#### TYPICAL MEASURED DISPERSION

