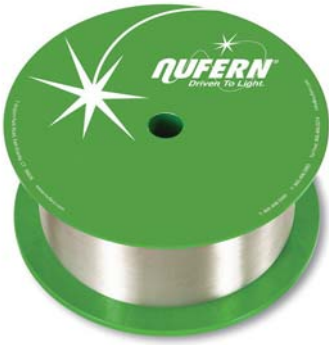


# Nufern 780 nm Select Cut-Off Single-Mode Fiber



Nufern's 780-HP high-performance select cut-off single-mode fiber is optimized at near IR wavelengths. This application-specific fiber was developed for applications requiring coupler generation, diode pigtailed and unique delivery needs for the near IR continuum. Compared to the best fibers available today, 780-HP fiber features higher proof test levels and tighter second mode cut-off tolerance. These features result in higher strength, increased component reliability, improved production yields and reduced costs for component manufacturers.

## Typical Applications

- Couplers
- Diode pigtailed

## Features & Benefits

- Superior fiber geometrical tolerances — Improved connectorization and coupling performance
- Extremely tight second mode cutoff tolerance — Enhanced component reproducibility
- Higher proof test level — Greater reliability for tight bend applications

## Optical Specifications

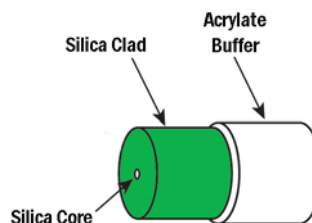
Operating Wavelength (nominal)	780 - 970 nm
Mode Field Diameter (1/e <sup>2</sup> fit - near field)	5.0 ± 0.5 μm @ 850 nm
Second Mode Cut-Off	730 ± 30 nm
Attenuation (nominal)	4 dB/km @ 780 nm
Attenuation	< 3.5 dB/km @850 nm
Numerical Aperture (nominal)	0.13
Bend Loss for 100 turns @ 13 mm radius	< 0.001 dB @ 780 nm
Bend Radius for 0.05 dB per 100 turns	Less than LTBR @ 780 nm

## 780-HP

Clad Diameter	125.0 ± 1.5 μm
Coating Diameter	245 ± 15 μm
Core-Clad Concentricity	< 0.5 μm
Coating/Clad Offset	≤ 5 μm
Coating Material	UV Curable, Dual Acrylate
Operating Temperature	-55 to +85° C
Short-Term Bend Radius	≥ 6 mm
Long-Term Bend Radius	≥ 13 mm
Proof Test Level	≥ 200 kpsi (1.4 GN/m <sup>2</sup> )

## Geometrical & Mechanical Specifications

Clad Diameter	125.0 ± 1.5 μm
Coating Diameter	245 ± 15 μm
Core-Clad Concentricity	< 0.5 μm
Coating/Clad Offset	≤ 5 μm
Coating Material	UV Curable, Dual Acrylate
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