

Nufern 780 nm Select Cut-Off Single-Mode Fiber



Coherent'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	780 – 970 nm
Core NA	0.130
Mode Field Diameter (Gaussian)	$5.0 \pm 0.5 \mu\text{m}$ @ 850 nm
Cutoff	$730 \pm 30 \text{ nm}$
Core Attenuation	$\leq 3.5 \text{ dB/km}$ @ 850 nm $\leq 4.0 \text{ dB/km}$ @ 780 nm

780-HP

Geometrical & Mechanical Specifications

Cladding Diameter	$125.0 \pm 1.0 \mu\text{m}$
Core Diameter	$4.4 \mu\text{m}$
Coating Diameter	$245.0 \pm 15.0 \mu\text{m}$
Coating Concentricity	$< 5.0 \mu\text{m}$
Core/Clad Offset	$\leq 0.50 \mu\text{m}$
Coating Material	Acrylate
Operating Temperature Range	$-55 \text{ to } 85 \text{ }^\circ\text{C}$
Short Term Bend Radius	$\geq 6 \text{ mm}$
Long Term Bend Radius	$\geq 13 \text{ mm}$
Proof test Level	$\geq 200 \text{ kpsi}$ (1.4 GN/m^2)



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www.coherent.com ; www.shop.coherent.com • Coherent products are manufactured under an ISO 9001:2008 certified quality management system.



Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Coherent can assist with your requirements.