

Ultra-High NA Select Cut-Off Fiber



Nuferm Ultra-High NA fibers are excellent bridge fibers between high NA waveguides and low NA transmission fiber. Ultra-High NA fibers provide excellent coupling efficiencies to high NA waveguides. In addition, the composition of Ultra-High NA fibers are tailored to thermally expand the core during splicing thus achieving lower splice loss to transmission fiber.

Typical Applications

- Fluoride and other non-silica fibers
- Planar Waveguides
- Fiber tails for high NA sources

Features & Benefits

- High numerical aperture — Bend insensitive fiber for miniature packages
- Thermally expandable core — Low splice loss to transmission fiber
- Small Mode Field Diameter — High coupling efficiency with Planar Waveguides

Optical Specifications

Operating Wavelength	980 – 1600 nm
Core NA	0.280
Mode Field Diameter	$5.0 \pm 1.0 \mu\text{m}$ @ 1550 nm
Cutoff	$920 \pm 50 \text{ nm}$

PS-GSF-3/125

Geometrical & Mechanical Specifications

Cladding Diameter	$125.0 \pm 1.0 \mu\text{m}$
Core Diameter	$3.0 \mu\text{m}$
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	UV Cured, Dual Acrylate
Operating Temperature Range	-40 to 85 °C
Proofstress Level	$\geq 100 \text{ kpsi}$ (0.7 GN/m^2)

The active version of this fiber is also available.



7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info@nufern.com • www.nufern.com Nufern products are manufactured under an ISO 9001:2008 certified quality management system.



Standard specifications and design parameters are listed above. 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 Nufern can assist with your requirements.