



Photosensitive 980 nm Polarization Maintaining Fiber

Nufern photosensitive 980 nm polarization maintaining fiber is designed to perform all functions of a 980 nm PM fiber but with enhanced photosensitivity for fabrication of gratings. This fiber is designed for use in pump diodes, couplers and multiplexers. PS-PM980 allows component manufacturers to make low cost fibertails for 980 nm pumps. Using one fiber that provides excellent photosensitivity, as well as polarization maintaining attributes, substantially reduces writing time thus lowering costs.

Typical Applications

- Grating-based pump diode pigtails
- Couplers
- Multiplexers

Features & Benefits

- PANDA-style stress structure for increased birefringence — Superior optical performance and uniformity
- High photosensitivity — Enables low cost, high yield grating fabrication
- Tightly controlled specifications — Excellent uniformity

Optical Specifications

Operating Wavelength	970 – 1550 nm
Core NA	0.120
Mode Field Diameter	$6.6 \pm 1.0 \mu\text{m}$ @ 980 nm
Cutoff	$900 \pm 70 \text{ nm}$
Core Attenuation	$\leq 3.0 \text{ dB/km}$ @ 980 nm
Beat Length	$\leq 3.5 \text{ mm}$ @ 980 nm
Normalized Cross Talk	$\leq -40.0 \text{ dB}$ at 4 m @ 980 nm
	$\leq -25.0 \text{ dB}$ at 100 m @ 980 nm

PS-PM980

Geometrical & Mechanical Specifications

Cladding Diameter	$125.0 \pm 1.0 \mu\text{m}$
Core Diameter	$6.0 \mu\text{m}$
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	$-40 \text{ to } 85 \text{ }^\circ\text{C}$
Prooftest Level	$\geq 100 \text{ kpsi}$ (0.7 GN/m^2)



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.

NU0043- 11/07/2013