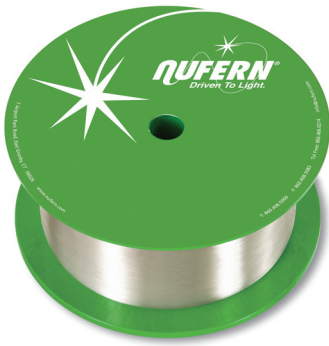


Polarization Maintaining Short Wavelength Fibers



Nufern's industry leading visible and short wavelength Polarization Maintaining fibers have superior waveguide, radiation, and mechanical properties enabling a large variety of new critical applications in diverse markets. High consistency and extreme end-to-end control of optical properties provide particular advantage in spectrographic and frequency sensitive applications. The intrinsically high level of radiation resistance allows this family to operate for extended periods of time on low earth orbits, near and deep space, and in applications where risk of exposure to man-made radiation is great.

Typical Applications

- Laser pigtailed
- Spectroscopy
- Sensors
- Bio-medical
- Metrology

Features & Benefits

- PANDA-style configuration — Superior performance, intrinsically good radiation performance
- Tight specifications — Highly deterministic results, highest product yield
- High Proof Test — Low risk of mechanical handling failure
- High fatigue failure resistance — Longest service life

Optical Specifications

Operating Wavelength (nominal)
 MFD (1/e² fit - near field)
 Second Mode Cut-Off
 Attenuation
 Beat Length (nominal)
 Normalized Cross Talk
 Normalized Cross Talk (nominal)
 Birefringence (nominal)

PM460-HP

460 – 630 nm
 3.3 ± 0.5 μm @ 515 nm
 410 ± 40 nm
 ≤ 100 dB/km @ 488 nm
 1.3 mm @ 460 nm
 3.5 x 10⁻⁴

PM630-HP

630 - 780 nm
 4.5 ± 0.5 μm @ 630 nm
 570 ± 50 nm
 ≤ 12 dB/km @ 630 nm
 1.8 mm @ 630 nm
 3.5 x 10⁻⁴

PM780-HP

780 - 980 nm
 5.3 ± 1.0 μm @ 850 nm
 710 ± 60 nm
 ≤ 4 dB/km @ 850 nm
 2.4 mm @ 850 nm
 ≤ -40 dB at 4 m @ 980 nm
 ≤ -30 dB at 100 m @ 980 nm
 3.5 x 10⁻⁴

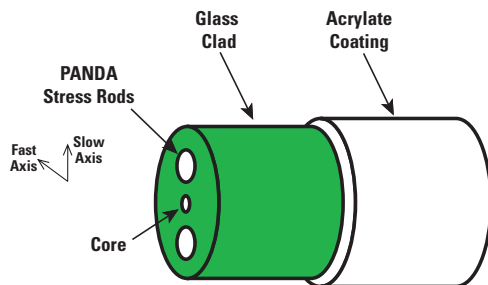
Geometrical & Mechanical Specifications

Clad Diameter
 Coating Diameter
 Core-Clad Concentricity
 Coating/Clad Offset
 Coating Material
 Operating Temperature
 Proof Test Level

125 ± 1 μm
 245 ± 15 μm
 < 0.5 μm
 ≤ 5 μm
 UV Cured, Dual Acrylate
 - 40 to + 85°C
 ≥ 200 kpsi (1.4 GN/m²)

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 245 ± 15 μm
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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.