

EyeSafe Delivery Fibers



Nufern has specifically engineered a unique range of single-mode 2µm beam delivery fibers for the long wavelength EyeSafe window from 1850-2200nm, available in both PM and non-PM versions. By applying our extensive fiber manufacturing expertise, gained in the demanding telecommunications industry, this family of fibers has excellent uniformity and high fatigue failure resistance. These fibers are aimed at emerging fiber applications for the 2µm wavelength, including medical, military/aerospace and industrial fiber laser markets.

Typical Applications

- Pigtailling 2µm components
- Tm-fiber lasers/amplifiers
- 2µm beam delivery

Features & Benefits

- Optimized for 2µm wavelengths — Higher performance
- Low bend loss at 2µm — Tighter packaging
- Tight tolerances — High product yield

Optical Specifications

Operating Wavelength
Core NA
Mode Field Diameter
Cutoff
Beat Length (nominal)
Birefringence

SM1950

1850 – 2200 nm
0.200
8.0 µm @ 1950 nm
(nominal)
1720 ± 80 nm
N/A
N/A

PM1950

1850 – 2200 nm
0.200
8.0 µm @ 1950 nm
(nominal)
1720 ± 80 nm
5.2 mm @ 1950 nm
nominal 3.5×10^{-4}

Geometrical & Mechanical Specifications

Cladding Diameter
Core Diameter
Coating Diameter
Coating Concentricity
Core/Clad Offset
Coating Material
Operating Temperature Range
Proofstest Level

125.0 ± 1.0 µm
7.0 µm
245.0 ± 15.0 µm
< 5.0 µm
≤ 0.50 µm
UV Cured, Dual Acrylate
-40 to 85 °C
≥ 100 kpsi (0.7 GN/m²)

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M05-A-045-A



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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.