10/125 Erbium/Ytterbium-Doped Single Mode Double Clad Fiber

Nufern's proprietary rare earth doping technology is used to deliver Er:Yb co-doped fibers with industry leading performance and reliability. This SM fiber features a 10 micron diameter core and a 125 micron diameter cladding with a 0.11 NA. The fiber design has been optimized to deliver high pump conversion efficiency and high power operation without rollover due to parasitic 1 µm ASE. The large core of the fiber allows for shorter fiber lengths in high power amplifiers to reduce the impact of non-linear effects. Utilizing Nufern's proprietary NuCOAT-FA coating technology with the best damp and dry heat performance available, ensures excellent stripping repeatability and extended operating lifetime.

Typical Applications

- Laser and amplifiers at 1.5 mm (CATV and Telecom)
- Military and commercial LIDAR
- High peak power, pulsed fiber amplifiers

Features & Benefits

- Single mode core design
- Optimized XP design — High efficiency and low parasitic 1 µm ASE
- Large core — Enables shorter fiber length for high-power pulsed amplifiers
- Double clad design — High power performance and high power conversion efficiency
- NuCOAT-FA fluoroacrylate coating — Greater fiber durability in extreme operating and storage conditions

Optical Specifications	**SM-EYDF-10P/125-XP**
Operating Wavelength	1530 – 1625 nm
Core NA	0.110
First Cladding NA (5%)	≥ 0.46
Cutoff	1450 ± 70 nm
Cladding Attenuation	≤ 30.0 dB/km @ 1095 nm
Cladding Absorption	2.90 ± 0.60 dB/m at 915 nm
Core Absorption	50.0 ± 20.0 dB/m near 1530 nm
Geometrical & Mechanical Specifications	
Cladding Diameter (flat-to-flat)	125.0 ± 1.5 µm
Core Diameter	10.0 µm
Coating Diameter	215.0 ± 5.0 µm
Coating Concentricity	< 5.0 µm
Core/Clad Offset	≤ 1.30 µm
Coating Material	Low Index Acrylate
Prooftest Level	≥ 100 kpsi (0.7 GN/m²)

Coating Non-Circularity <2%

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RoHS

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 Nufern can assist with your requirements.