NuEYDF-SMR Passive Fibers

NuEYDF-SMR Germanium-doped (GDF) passive single-mode fibers are precision matched to NuEYDF-SMR active fibers and are designed to meet the demanding performance requirements for fast-growing LIDAR and satellite communication applications. These fibers feature a HTA coating option for high temperature LIDAR/Autonomous Vehicle navigation applications, radiation resistance for space applications and are optimized for low lasing threshold and high efficiency.

Typical Applications

- Fiber Laser Amplifiers for
  - LIDAR and Autonomous Vehicle Navigation
  - Space Applications
  - CATV

Features & Benefits

- HTA Coating option for high temperature automotive applications
- Radiation resistance for space applications
- All Glass Design to provide high optical reliability for the pump

Optical Specifications	SM-GDF-6/110/125-HTA	SM-GDF-10/110/125-HTA	SM-GTF-10/110/125-HP
Operating Wavelength	600 - 1600 nm	600 - 1600 nm	600 - 1600 nm
Core NA	0.21	0.14	0.14
First Cladding NA	0.23 ± 0.01	0.23 ± 0.01	0.23 ± 0.01
Second Cladding NA	≥ 0.46	≥ 0.46	≥ 0.46
Core Attenuation	≤ 1 dB/km at 1550 nm	≤ 1 dB/km at 1550 nm	≤ 1 dB/km at 1550 nm
Mode Field Diameter	6.0 ± 0.5 µm	9.2 ± 1.1 µm	9.2 ± 1.1 µm
Geometrical & Mechanical Specifications			
Cladding Diameter	110 ± 5 µm	110 ± 5 µm	110 ± 5 µm
Core Diameter (Nominal)	6 µm	10 µm	10 µm
Coating Diameter	245 ± 10 µm	245 ± 10 µm	245 ± 10 µm
Core/Clad Offset	≤ 0.8 µm	≤ 1 µm	≤ 1 µm
Coating Material	High Temperature Acrylate	High Temperature Acrylate	Low Index Polymer NuCoat-FA-HP
Prooftest Level	≥ 100 kpsi (0.7 GN/m^2)	≥ 100 kpsi (0.7 GN/m^2)	≥ 100 kpsi (0.7 GN/m^2)
Matched Active Fiber	SMR-EYDF-6/110/125-HTA	SMR-EYDF-10P/110/125-HTA	SMR-EYDF-10P/110/125-HTA

COHERENT

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www.coherent.com ; www.shop.coherent.com • Coherent products are manufactured under an ISO 9001:2008 certified quality management system.

RoHS compliant