

EyeSafe Holmium-Doped SM Single Clad Fiber (Preform)

Description:

UFE single-mode (SM) single-clad holmium-doped optical fiber is designed specifically for applications using pumping in the fiber core. The fiber features high concentration of holmium ions and high conversion efficiency of pumping radiation, low concentration of hydroxyl ions and low background losses. This single-mode fiber is well compatible with standard “telecom” fiber technology and components.

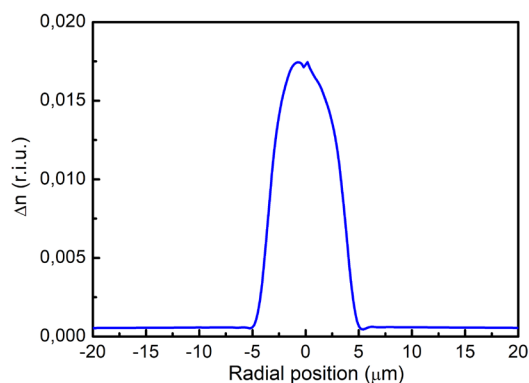
Features:

- High holmium concentration – high core absorption to realize short fiber lengths to reduce detrimental non-linear effects
- High laser slope efficiency (83 %) – efficient utilization of the pump power at 1950 nm
- Suitable for LPFG/FBG inscription
- Single-mode output - good splice-ability to standard single-mode telecom fiber-based components

Optical specifications SM-HDF-6.5/125:

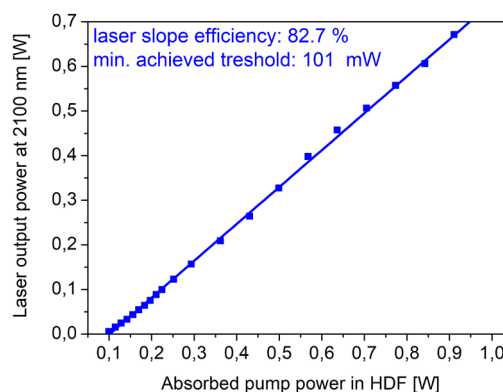
- Single-mode operation: beyond 1600 nm
- Operating wavelength: 1950-2100 nm
- Numerical aperture of the core: 0.22
- Cut-off wavelength: 1580 nm
- Background losses: 0.025 dB/m
- Core absorption: 66 dB/m at 1950 nm
- Fluorescence lifetime ($^5I_7 - ^5I_8$): 1250 μ s

Refractive index fiber profile:

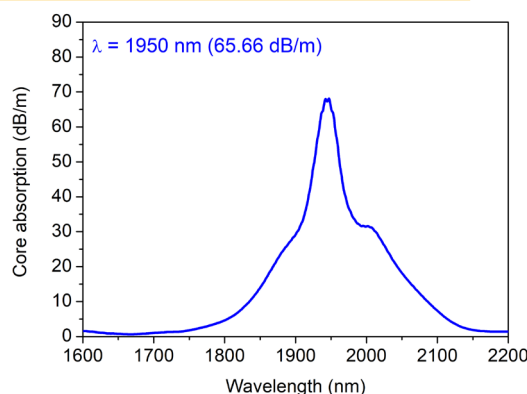


Applications:

- Femtoseconds fiber lasers
- Broadband light (ASE) sources
- High-power, CW fiber lasers and amplifiers



Absorption band around 1950 nm:



Geometric and mechanical specifications:

- Core diameter: 6.5 μ m
- Cladding diameter: 125 \pm 1 μ m
- Coating diameter: 250 \pm 15 μ m
- UV acrylate coating for better fiber durability in extreme environmental operating & storage conditions