

1407 Doped Fiber

DF1007



Passive-10/125DC

Passive fibers are especially designed and manufactured to match the optical guiding properties of large mode area Ytterbium doped fibers. This enables optimal mode coupling with minimal splice loss for maintaining the power and excellent beam quality between all elements of a fiber laser or amplifier. High-quality Fiber Bragg Gratings can be written into all passive fibers. Passive fibers are available in single cladding, double cladding (DC), single cladding polarization maintaining (PM) and double cladding polarization maintaining configurations.

FEATURES

- Realna — Most Accurate Fiber Core Na to Enable Superior Predictability of Fiber Performance and Minimal Splice Loss
- Glass Cladding Diameter is Designed to “Fit-in” Octagonal Active Fibers
- Low Signal and Pump Coupling Losses from Passive to Active Fiber
- Single Cladding Fibers Feature a Dual Coated High-index Acrylate Coating
- Double Cladding Fibers Feature a $n_a \geq 0.48$ Low-index Fluoroacrylate Coating, Which is Proven to Operate Up to 120°C and in Extreme Humidity.
- Fiber Bragg Gratings can be Written into All Large Mode Area Passive Fibers

USE IN

- Pigtails for Fiber Lasers and Amplifiers
- All-fiber Subassemblies
- High-brightness Power Delivery
- Fiber-based Components for Fiber Lasers (e.g. Pump Combiners; FBGs)

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|-----------------------------|---------------|
| Core Diameter | 10±1.0 μm |
| Cladding Diameter | 125.0±2.0 μm |
| Core NA @ 1060 nm | 0.080±0.005 |
| Coating Diameter | 245.0±15.0 μm |
| Cladding Numerical Aperture | 0.48 |
| Proof Test | 100 kpsi min. |
| Core Loss @ 1200 nm | 5 dB/km max. |