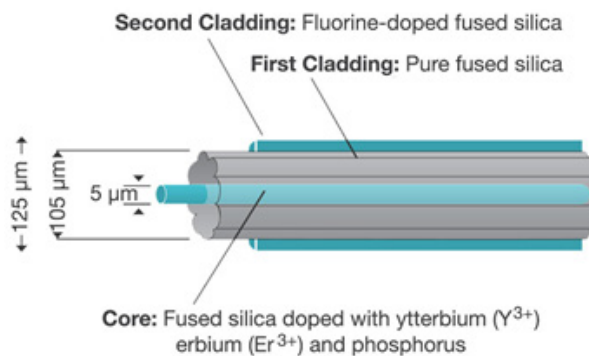




Dual-Clad Erbium/Ytterbium Doped Fiber

Unlike other cladding pump or dual-clad fibers, Fibercore's Dual-Clad Erbium/Ytterbium Doped Fiber (CP1500Y) was originally designed as a high-power communications amplifier fiber. The pump light is guided within an all-silica structure, using a fluorinated secondary cladding to create the pump guide boundary, without the need for low index polymers. The all-silica design gives outstanding power handling across full temperature and humidity ranges, without the reliability problems observed in low index polymer cladding designs.

The all-silica design means the fiber can be stripped, cleaved and spliced using standard telecoms industry equipment, without the need to recoat the fiber.



Advantages:

- All-silica design engineered for environmental stability
- Easy to strip, cleave and splice
- Petal structure optimizes pump conversion effectively
- Pump Guiding Structure is not removed after coating stripping process. Therefore, there is no need for low index recoating
- Field proven in volume applications since 1999

Related Products:

- Isolating Wavelength Division Multiplexer (CP-IWDM)
- Multi-Mode Pump Fiber (MM105)
- Passive Dual-Clad Fiber (SMM900)

Typical applications:

- High Power Erbium Doped Fiber Amplifiers (EDFAs)
- Ytterbium/Erbium Doped Fiber Amplifier (YEDFA)
- Fiber Lasers
- Light Radar (LIDAR)
- Cable Television (CATV)

Product Variant:

- **CP1500Y** Double clad ErYb doped fiber for high power amplifiers for CATV applications



Specifications

| | CP1500Y |
|----------------------------------|-------------------------------------------|
| Laser Core | |
| Composition | Phosphosilicate with erbium and ytterbium |
| Operating Wavelength (nm) | 1520 - 1570 |
| Numerical Aperture | 0.20 – 0.22 |
| Mode Field Diameter (µm) | 5.6 – 6.4 @1550nm |
| Cut-Off Wavelength (nm) | 1300 - 1450 |
| Attenuation (dB/km) | ≤ 200 @1240nm |
| Absorption (dB/m) | 19 (Nominal) @1550nm |
| Pump Guide | |
| Composition | Pure silica with F-doped silica cladding |
| Numerical Aperture | 0.24 – 0.28 |
| Mean Core Diameter (µm) | 85 – 105 |
| Absorption (dB/m) | 1 (Nominal) @940nm |
| General | |
| Proof Test Level (%) | 1 (100 kpsi) |
| Coating Type | Dual Acrylate |
| Cladding Diameter (µm) | 125 ± 1 |
| Coating Diameter (µm) | 245 ± 15 |

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