

SPECIALTY OPTICAL FIBER

IXF-2CF-EY-O-10-130-0.10-RAD-LL

Double Clad Er/Yb Co-Doped Fiber

IXF-2CF-EY fibers are double clad Erbium-Ytterbium co-doped fibers. The core composition has been carefully selected in order to get high efficiency and low 1 μm emission ratio, which are the recognized trade mark of Exail Erbium-Ytterbium co-doped fibers developed over the past 10 years

The octagonal shape of the 2nd cladding provides homogeneous pump signal transverse distribution over the multimode guide.

Dual coating with low index primary layer

A High Temperature dual layer acrylate Coating (HTC) is used in order to increase the long term operational temperature range up to 125°C making it the ideal solution for severe environments.

For easy integration, matching passive fibers are available as well as pump combiners



Benefits & Features

- Extensive Exail know-how in Er/Yb fibers core composition
- High efficiency & Power Conversion Efficiency
- Low 1 μm emission
- Easy to splice and cleave
- Singlemode operation
- +125°C long term operational temperature range
- Radiation Hardening core composition

Applications

- Harsh Environment Fibre Laser and Amplifier
- Space Grade Amplifier
- High Power Telecom & CATV Amplifier
- Mid Power Amplifier

Related Products

- IXF-2CF-PAS-10-130-0.10
- IXF-PAS-10-130-0.10
- IXS-COMB-2-1-1-10-130-A

IXF-2CF-EY-O-10-130-0.10-RAD-LL

TECHNICAL SPECIFICATIONS

Parameters

| | |
|---|-----------------|
| Core diameter (μm) | 10 ± 0.5 |
| Cladding diameter (flat/flat) (μm) | 125 ± 3 |
| Cladding shape | Octagonal |
| Coating diameter (μm) | 245 ± 15 |
| Core NA | 0.10 ± 0.01 |
| Cladding NA | ≥ 0.46 |
| Clad absorption @915nm (dB/m) | 2.7 ± 0.5 |
| Clad absorption @976nm* (dB/m) | 10.8 ± 2.0 |
| Core absorption @1536nm (dB/m) | > 40 |
| Multimode background losses (dB/km) | < 50 |
| Core-clad offset (μm) | < 1.0 |
| Proof test level (kpsi) | 100 |
| RIGV @1560nm (dB/kRad) | < 0.03 |

* Calculated from 915 nm absorption value

Comments:

High temperature acrylate coating (long term temperature up to 125°C)

HeNe multimode tested

OTDR tested

Power Conversion Efficiency (PCE) $> 40\%$ (Following XFS/080301ARL procedure)

RIGV: Radiation Induced Gain Variation

RIGV to be measured in amplifier configuration (5W output power) with 915nm backward pumping (fiber length ~ 8m)

Exail reserves the right to change, at any time and without notice, the specifications, design, function or form of its products described herein.

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