SPECIALTY OPTICAL FIBER

IXF-2CF-EY-O-12-130-RAD

Double Clad Er/Yb Co-Doped Fiber

IXF-2CF-EY fibers are double clad Erbium-Ytterbium co-doped fibers. The core composition has been carefuly 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
- +125°C long term operational temperature range
- Radiation Hardening core composition

Applications

- Harsh Environment Fibre Laser and Amplifier
- Space Grade Amplifier
- LIDAR
- Mid Power Amplifier

Related Products

- IXF-2CF-PAS-12-130-0.17-RAD
- IXS-COMB-2-1-1-12-130-A

PSD-L-Q-E-086 L

IXF-2CF-EY-O-12-130-RAD_edC_03072023

IXF-2CF-EY-O-12-130-RAD
TECHNICAL SPECIFICATIONS

Parameters

Core diameter (µm)	12 ± 1
Cladding diameter (flat/flat) (µm)	125 ± 3
Cladding shape	Octagonal
Coating diameter (µm)	210 ± 15
Core NA	0.19 ± 0.02
Cladding NA	≥ 0.46
Clad absorption @915nm (dB/m)	2.9 ± 0.6
Clad absorption @976nm* (dB/m)	11.6 ± 2.4
Core absorption @1536nm (dB/m)	60 ± 10
Multimode background losses (dB/km)	< 50
Core-clad offset (µm)	≤ 1.0
Proof test level (kpsi)	100
RIGV @1560nm (dB/kRad)	< 0.02

** 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 has been measured in amplifier configuration (10W output power) with 915nm backward pumping (fiber length = 6m)

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