Double Clad All Glass Er/Yb Fibers

IXF-2CF-AG-EY-O-5-105-125-HTC

IXF-2CF-AG-EY-O-9-105-125-HTC

IXF-2CF-AG-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 1µm emission ratio, which are the recognized trade mark of iXblue Erbium-Ytterbium co-doped fibers developed over the past 10 years.

The All Glass design preserves external coating to be in contact with the pump signal, ensuring a long term operation in critical environment.

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 1.5 µm LIDAR in severe environments.

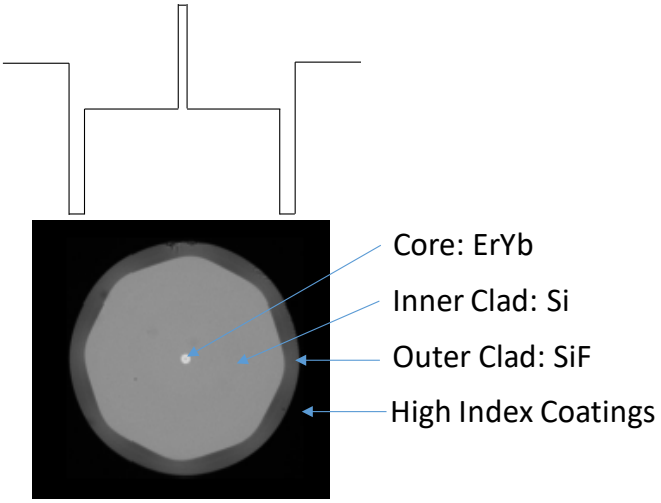
For easy integration, matching double clad all glass passive fibers are available as well as pump combiners.

FEATURES & BENEFITS

- Extensive iXblue know-how in Er/Yb fibers core composition
- High efficiency, Power Conversion Efficiency done on every new fiber draw > 40 %
- Low 1µm emission
- Easy to splice and cleave
- Maching passive fibers& components available
- All Glass design
- +125°C long term operational temperature range

APPLICATIONS

- High Power Telecom & CATV Amplifier
- LIDAR
- Harsh Environment Fibre Laser and Amplifier



All Glass Design : an extra layer of Fluorine doped Silica (SiF) is added between the silica clad and coating

IXF-2CF-AG_edC_03122020
PSD-L-E-Q-86 K

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iXblue PHOTONICS

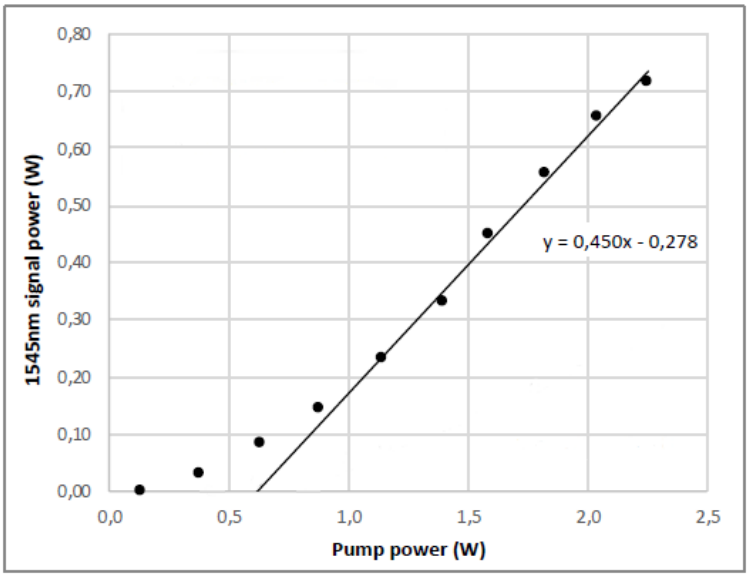
IXF-2CF-AG-EY-O-5-105-125-HTC & IXF-2CF-AG-EY-O-9-105-125-HTC TECHNICAL SPECIFICATIONS

Parameters

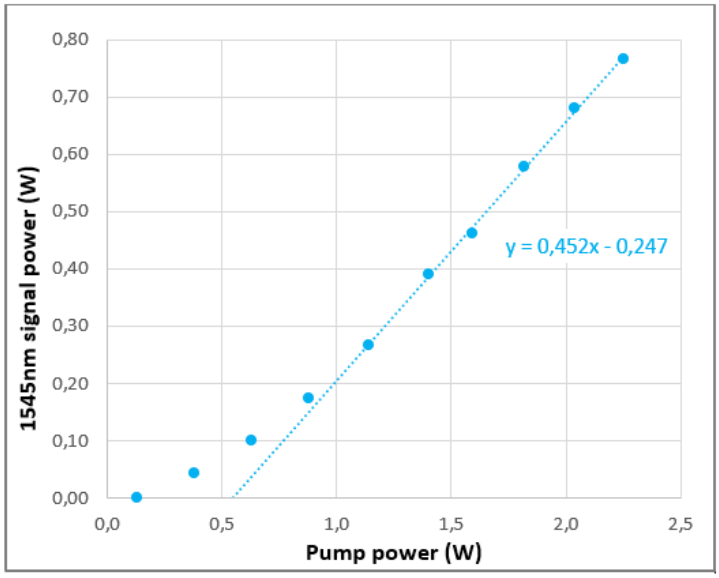
Part number	IXF-2CF-AG-EY-O-5-105-125-HTC	IXF-2CF-AG-EY-O-9-105-125-HTC
Core diameter	5 ± 0.5 µm	8.5 ± 0.5 µm
Inner clad diameter (flat-flat)	105 ± 3 µm	
Inner clad shape	octagonal	
Clad diameter	125 ± 3 µm	
Outer clad shape	circular	
Core-clad offset	< 1.0 µm	
Coating diameter	215 ± 15 µm	
Coating Material	High temperature acrylate coatings (long term temperature up to 125°C) High Index coatings	
Core NA	0.19 ± 0.02	0.14 ± 0.015
Inner clad NA	≥ 0.22	≥ 0.22
MFD @1550nm		9.3 ± 0.9 µm
Clad absorption @915nm	1.1 ± 0.15 dB/m	2.8 ± 0.5 dB/m
Clad absorption @976nm*	3.7 ± 0.5 dB/m	10.0 ± 2.0 dB/m
Core absorption @1536nm	75 ± 15 dB/m	75 ± 10 dB/m
Multimode background losses	< 50 dB/km	
Proof test level	100 kpsi	
Power Conversion Efficiency (PCE)**	> 40 %	

* Calculated from 915 nm absorption value
** Following XFS/080301ARL procedure

Specifications are subject to change without notice



IXF-2CF-AG-EY-O-5-105-125-HTC in amplifier
Background pump @ 976 nm; Pin = 10 dBm; 4.7 m



IXF-2CF-AG-EY-O-9-105-125-HTC in amplifier
Background pump @ 976 nm; Pin = 10 dBm; 2.2 m

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