# IXF-2CF-AG-EY-O-5-125-HTC Series

## Double Clad All Glass Er/Yb Co-Doped Fibers

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 1 µm emission ratio, which are the recognized trade mark of Exail 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.

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

Dual coating with high index 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.



#### **Benefits & Features**

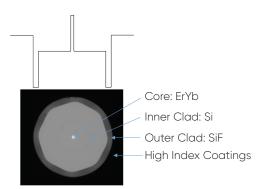
- · All Glass design
- Extensive Exail know-how in Er/Yb fibers core composition
- · High efficiency, Power Conversion Efficiency
- Low 1 µm emission
- · Easy to splice and cleave
- · Singlemode operation
- +125°C long term operational temperature range

### **Applications**

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

### **Related Product**

• IXF-2CF-AG-PAS-5-105-125-HTC



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

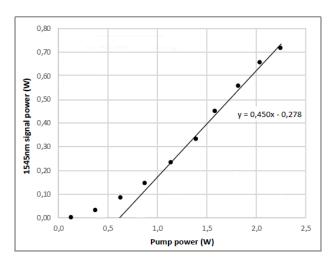
# IXF-2CF-AG-EY-O-5-125-HTC SERIES TECHNICAL SPECIFICATIONS

#### **Parameters**

Part number	IXF-2CF-AG-EY-O-5-105-125-HTC-Q	IXF-2CF-AG-EY-O-5-105-125-HTC-VU
Core diameter (µm)	5 ± 0.5	
Inner cladding diameter (flat-flat) (µm)	105 ± 3	
Inner cladding shape	Octagonal	
Cladding diameter (µm)	125 ± 1	
Outer cladding shape	Circular	
Core-clad offset (µm)	< 1.0	
Coating diameter (µm)	215 ± 15	
Coating material	High temperature acrylate coating (long term temperature up to 125°C) High Index primary coating	
Core NA	0.19 ± 0.02	
Inner cladding NA	≥ 0.22	
MFD @1550nm (μm)	6.4 ± 0.5	
Clad absorption @915nm (dB/m)	1.0 ± 0.15	1.15 ± 0.15
Core absorption @1536nm (dB/m)	65 ± 10	50 ± 10
Multimode background losses (dB/km)	< 50	
Proof test level (kpsi)	100	

Comments:

HeNe multimode tested OTDR tested



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

