

## **L-Band Erbium Doped Fiber**

## **Single-Mode Fiber**

Nufern's high performance L-Band Erbium-Doped 980-HP Fibers (EDFL-980-HP and EDFL-980-HP-80) are designed for use in L-band amplifers (1570 - 1610 nm) and compact ASE sources. The 80  $\mu$ m version is a reduced-cladding fiber ideal for small form-factor devices. Both types can be powered with 980 nm or 1480 nm pumps. All Nufern's erbium-doped fibers are fabricated with a proprietary doping technology and have highly consistent and reproducible spectroscopy. These fibers are extensively characterized and accompanied by lot specific data.

## Applications:

- L-band amplifiers
- Compact ASE sources
- Small form factor devices

## **Features and Benefits:**

- Highly consistent and reproducible spectroscopy
- Tight optical and mechanical tolerances
- Excellent core concentricity for low splice loss
- Detailed lot-specific characterization data

OPTICAL SPECIFICATIONS	EDFL-980-HP EFX150250905512524AXXXA0D	EDFL-980-HP-80 EFX150060905608016AXXXA0D
Operating Wavelength (nominal)	L-Band	L-Band
MFD @ 1550 nm	$5.5 \pm 0.5 \mu{ m m}$	$5.5 \pm 0.5 \mu\text{m}$
Peak Absorption near 1530 nm	$25 \pm 2 \text{ dB/m}$	$25 \pm 2 \text{ dB/m}$
Peak Absorption near 980 nm	<u>&gt;</u> 7.0 dB/m	<u>&gt;</u> 7.0 dB/m
Loss @ 1200 nm	<u>&lt;</u> 15.0 dB/km	<u>&lt;</u> 15.0 dB/km
Second Mode Cut-Off	920 ± 50 nm	920 ± 50 nm
Numerical Aperture (nominal)	0.25	0.25
GEOMETRICAL AND MECHANICAL SPECS		
Clad Diameter	125 ± 1.0 μm	$80 \pm 1.0 \mu\text{m}$
Coating Diameter	245 ± 10 μm	165 ± 10 μm
Core-Clad Concentricity	< 0.3 µm	< 0.3 µm
Coating/Clad Offset	<u>&lt;</u> 5 μm	<u>&lt;</u> 5 μm
Proof Test Level	<u>&gt;</u> 200 kpsi (1.4 GN/m²)	<u>&gt;</u> 200 kpsi (1.4 GN/m²)
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
Operating Temperature	- 40 to +85° C	- 40 to +85° C



Standard specifications and design parameters are listed above. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements. Call 860-408-5000, toll free at 866-466-0214 or email us at info@nufern.com.



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