

L-Band Erbium Doped Fibers

Nuferm high performance L-Band Erbium-doped fibers are designed for use in L-band amplifiers and compact ASE sources. The 80 μm version is a reduced-cladding fiber ideal for small form-factor devices. All Nuferm erbium-doped fibers are fabricated with a proprietary doping technology and have highly consistent and reproducible spectroscopy, ensuring intra-lot and lot-to-lot uniformity. These fibers are extensively characterized and accompanied by lot specific data.



Typical Applications

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

Features & Benefits

- Highly consistent and reproducible spectroscopy — no need to batch matching GFFs
- Excellent core concentricity — low splice loss
- Detailed lot-specific characterization data — compatible with modeling programs

Optical Specifications

	EDFL-980-HP	EDFL-980-HP-80	EDFL-1480-HP
Operating Wavelength	1565 – 1625 nm	1565 – 1625 nm	1565 – 1625 nm
Core NA	0.250	0.250	0.250
Mode Field Diameter	5.5 \pm 0.5 μm @ 1550 nm	5.5 \pm 0.5 μm @ 1550 nm	5.3 \pm 0.5 μm @ 1550 nm
Cutoff	920 \pm 50 nm	920 \pm 50 nm	1420 \pm 50 nm
Core Attenuation	\leq 15.0 dB/km @ 1200 nm	\leq 15.0 dB/km @ 1200 nm	\leq 15.0 dB/km @ 1200 nm
Core Absorption	25.0 \pm 2.0 dB/m near 1530 nm 18.5 \pm 11.5 dB/m near 980 nm	25.0 \pm 2.0 dB/m near 1530 nm 18.5 \pm 11.5 dB/m near 980 nm	15.0 \pm 3.0 dB/m at 980 nm 30.0 \pm 3.0 dB/m near 1530 nm

Geometrical & Mechanical Specifications

	EDFL-980-HP	EDFL-980-HP-80	EDFL-1480-HP
Cladding Diameter	125.0 \pm 1.0 μm	80.0 \pm 1.0 μm	125.0 \pm 1.0 μm
Core Diameter	2.8 μm	2.8 μm	4.5 μm
Coating Diameter	245.0 \pm 10.0 μm	165.0 \pm 10.0 μm	245.0 \pm 10.0 μm
Coating Concentricity	< 5.0 μm	< 5.0 μm	< 5.0 μm
Core/Clad Offset	\leq 0.30 μm	\leq 0.30 μm	\leq 0.30 μm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
Operating Temperature Range	-40 to 85 $^{\circ}\text{C}$	-40 to 85 $^{\circ}\text{C}$	-40 to 85 $^{\circ}\text{C}$
Proof Test Level	\geq 200 kpsi (1.4 GN/m ²)	\geq 200 kpsi (1.4 GN/m ²)	\geq 200 kpsi (1.4 GN/m ²)



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Standard specifications and design parameters are listed above. Specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nuferm can assist with your requirements.