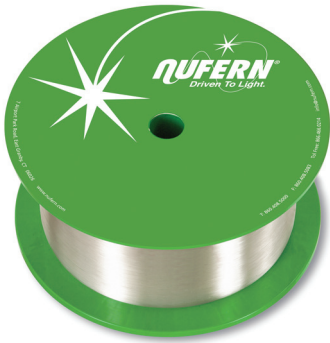


C-Band Erbium Doped Fiber



Nufern's high performance C-Band Erbium-Doped 980-HP Fibers (EDFC-980-HP and EDFC-980C-HP-80) are designed for use in single and multi-channel C-band amplifiers and ASE sources. The 80 μm version is suitable for small form-factor amplifiers and metro amps. Both types can be powered with 980 nm or 1480 nm pumps. All Nufern erbium-doped fibers are fabricated with a proprietary technology and have highly consistent and reproducible spectroscopy.

Typical Applications

- Single and multi-channel C-band amplifiers
- ASE sources
- Small form factor amps
- Metro amps

Features & Benefits

- Highly consistent and reproducible spectroscopy — high manufacturing yields when matching to a GFF
- Excellent core concentricity — low splice loss to single-mode fibers
- High aluminum concentration — inherent gain flatness

Optical Specifications

Operating Wavelength (nominal)	C-Band
Mode Field Diameter @ 1550 nm	$5.8 \pm 0.5 \mu\text{m}$
Peak Absorption near 1530 nm	$6.0 \pm 1.0 \text{ dB/m}$
Peak Absorption near 980 nm	$\geq 3 \text{ dB/m}$
Loss @ 1200 nm	$\leq 10 \text{ dB/km}$
Second Mode Cut-Off	$920 \pm 50 \text{ nm}$
Saturation Power @ 1530 nm (nominal)	0.18 mW
Numerical Aperture (nominal)	0.23

EDFC-980-HP

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Numerical Aperture (nominal)	0.23

EDFC-980-HP-80

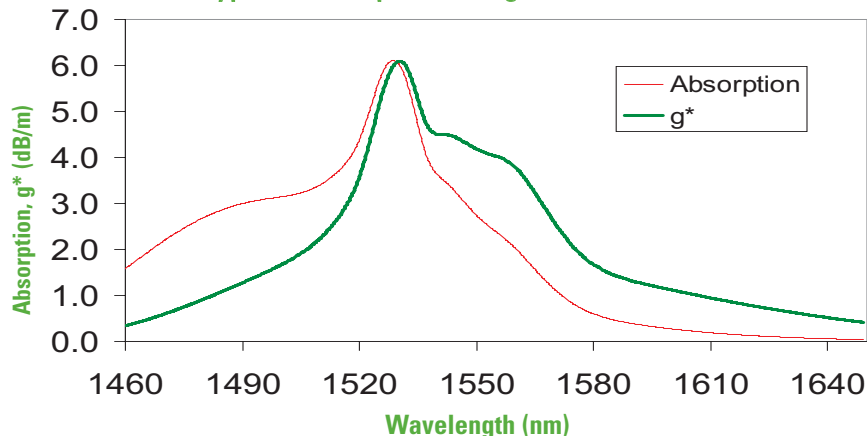
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Loss @ 1200 nm	$\leq 10 \text{ dB/km}$
Second Mode Cut-Off	$920 \pm 50 \text{ nm}$
Saturation Power @ 1530 nm (nominal)	0.18 mW
Numerical Aperture (nominal)	0.23

Geometrical & Mechanical Specifications

Clad Diameter	$125.0 \pm 1.0 \mu\text{m}$
Coating Diameter	$245 \pm 10 \mu\text{m}$
Core-Clad Concentricity	$< 0.3 \mu\text{m}$
Coating/Clad Offset	$\leq 5 \mu\text{m}$
Coating Material	UV Cured, Dual Acrylate
Operating Temperature	- 40 to +85° C
Proof Test Level	$\geq 200 \text{ kpsi (1.4 GN/m}^2\text{)}$

Clad Diameter	$80.0 \pm 1.0 \mu\text{m}$
Coating Diameter	$165 \pm 10 \mu\text{m}$
Core-Clad Concentricity	$< 0.3 \mu\text{m}$
Coating/Clad Offset	$\leq 5 \mu\text{m}$
Coating Material	UV Cured, Dual Acrylate
Operating Temperature	- 40 to +85° C
Proof Test Level	$\geq 200 \text{ kpsi (1.4 GN/m}^2\text{)}$

Typical Absorption and g^* for EDFC-980-HP



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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 Nufern can assist with your requirements.

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