

ERBIUM-DOPED FIBERS FOR C-BAND

Specification Sheet

HE980 and HE980 80



Leading Optical Innovations

Erbium-Doped

Product Description

HE980 and its reduced-cladding counterpart HE980-80, maximize efficiency over a wide range of pump powers in the C-Band. HE980 is optimized to be most efficient at low to medium pump powers. This fiber offers excellent spectral reproducibility and batch-to-batch uniformity. HE980 has been used extensively in transoceanic communication systems requiring ultra-high reliability. To further refine this selection, OASiX software modeling allows DWDM and CATV designers to plug in parameters such as efficiency, noise figure, and spectral gain shape. We use patented processes to protect against hydrogen-induced loss.

OASiX Software Package. Accurate prediction of EDF performance is essential to applications design. To meet this need, OFS offers the OASiX Optical Amplifier Simulation System Software to design and predict EDFA performance. This specialized software package allows you to accurately predict the performance at all pump powers. OASiX includes modeling parameters specific to the lot of EDF you purchase. OASiX is also available in a DLL version to combine with external optimization tools.

Typical Applications

- Low-to-medium pump power applications
- DWDM amplifiers
- CATV amplifiers

Features and Benefits

- Excellent spectral reproducibility
- High efficiency for low-to-medium pump power
- High reliability with extensive track record
- H₂ insensitive
- Low and consistent splice loss
- Dual-layer acrylate coating for excellent micro-bending, abrasion resistance, and mechanical strength
- OASiX modeling support

Related Products & Capabilities

- See our full line of erbium-doped fibers for high-power C-Band, including HP980X, MP980, R37003, and R37004

Ask us about other options available:

- Color-Coded Buffers**
- Coils or Spools**
- Custom Designs**
- Customized Spectral Shape**

To order items on this spec sheet, please contact our facility in:

- Somerset, New Jersey
1-732-748-7402
- or by email inquiry to:
Info@SpecialtyPhotonics.com



Leading Optical Innovations

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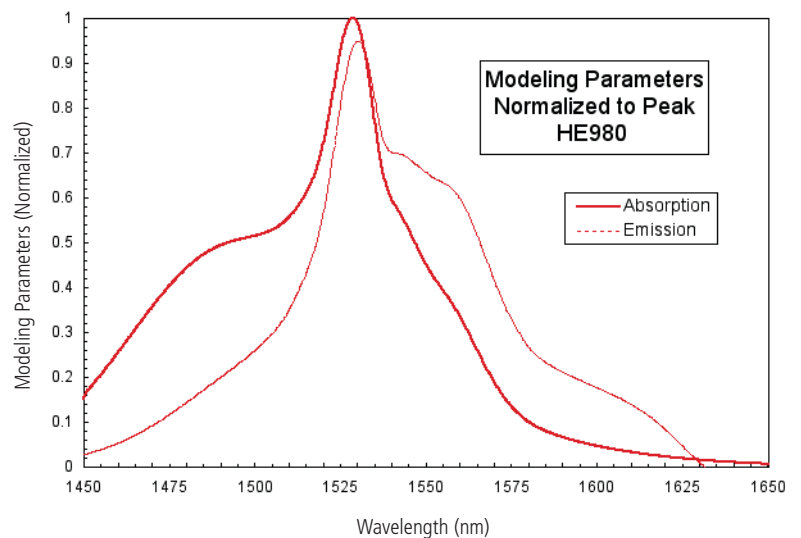
www.SpecialtyPhotonics.com

Fiber Specifications

Optical Properties	HE980	HE980 80
Peak absorption near 1530 nm	2.5 - 4.5 dB/m	2.5 - 4.5 dB/m
Cutoff wavelength	800 - 960 nm	800 - 960 nm
Numerical aperture	0.29 ± 0.02	0.29 ± 0.02
Mode field diameter @ 1550 nm	4.4 ± 0.8 μm	4.4 ± 0.8 μm
PMD (typical)	≤2 fs/m	≤2 fs/m
Loss at 1200 nm	<15 dB/km	<15 dB/km
Physical Properties	HE980	HE980 80
Co-dopants	Ge/Al	Ge/Al
Aluminum content (m%) (typical)	12	12
Cladding diameter	125 ± 2 μm	80 ± 2 μm
Coating diameter	250 ± 10 μm	165 ± 10 μm
Coating/cladding concentricity error	≤15 μm	n/a
Core concentricity error	≤0.3 μm	≤0.3 μm
Mechanical and Testing Data	HE980	HE980 80
Proof test level	2.0% (200 kpsi)	2.0% (200 kpsi)
Order by Part Number	107 528 366	300 378 726

Erbium-Doped

Modeling Parameters



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