LIEKKI[™] Er80-x/125

*n*LIGHT



Large Mode Area Erbium Doped Fiber

LIEKKITM Er80-4/125 and Er80-8/125 fibers are very highly doped large mode area erbium fibers suitable for medium-power amplifiers and lasers.

Good spliceability, high doping and a large core make these fibers ideal for medium peak power pulse amplification in the eye-safe 1.5 μ m wavelength region. High erbium concentration reduces required application fiber length considerably while providing strong gain and reduced non-linear effects.

LIEKKITM Er80-8/125 fibers can be used also with 980 nm pumps.

Applications

- Short pulse amplifiers
- Medium power low non-linearity applications
- LIDAR
- Medical
- Sensing

Features

T 8.4

- Excellent batch consistency of erbium peak absorption and spectral shape
- Ideal for pulse amplification in 1550 nm range
- Very short fiber lengths (typically less than 2 m) reduces non-linear effects like FWM, SRS and SBS
- Very good temperature behavior
- Low splice loss, LIEKKITM EasySplice software for splicing parameters

T 8.4

- Suitable for both 980 nm and 1480 nm pumping
- Dual layer UV-cured acrylate coating

Typical device specification

		LIEKKI [™] Er80-4/125	LIEKKI [™] Er80-8/125
Optical			
Mode field diameter at 1550 nm	μm	6.5 ± 0.5	9.5 ± 0.8
Peak core absorption at 1530 nm	dB/m	80 ± 8	80 ± 8
Core numerical aperture (nominal)		0.2	0.13
Cut-off wavelength	nm	800 - 980	1100 - 1400
Geometrical and mechanical			
Core concentricity error	μm	< 0.7	< 0.7
Cladding diameter	μm	125 ± 2	125 ± 2
Cladding geometry		Round	Round
Coating diameter	μm	245 ± 15	245 ± 15
Coating material		High index acrylate	High index acrylate
Proof test	%	> 1	> 1

Custom configurations also available.

Notice

nLIGHT continually improves its products to provide its customers with outstanding quality and reliability. nLIGHT may make changes to specifications and product descriptions at any time, without notice. In addition, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact your nLIGHT sales representative.