



LIEKKI™ 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 μm wavelength region. High erbium concentration reduces required application fiber length considerably while providing strong gain and reduced non-linear effects.

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

Features

- 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, LIEKKI™ EasySplice software for splicing parameters
- Suitable for both 980 nm and 1480 nm pumping
- Dual layer UV-cured acrylate coating

Applications

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

Typical Device Performance

Package		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 Aperature (nominal)		0.2	0.2
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	μm	Round	Round
Coating Diameter	μm	245 ± 15	245 ± 15
Coating Material		High Index Acrylate	High Index Acrylate
Proof Test	Kpsi	> 1	> 1

Proven Performance