LIEKKI™ Er60-xx/xxx – Large Mode Area Erbium Doped Fiber



LIEKKITM Er60-20/125 and Er60-40/250 fibers are large mode area erbium doped fibers suitable for medium power amplifiers and lasers. These fibers are ideally suited for compact, eye-safe devices (1.55 - 1.6 μm region). Both 980 nm and 1480 nm pump diodes may be used for pump sources.

LIEKKI $^{\text{TM}}$ Er60-xx/xxx fibers are currently only available as double cladding (Er60-20/125DC and Er60-40/250DC) fibers.

Features

- Good beam quality through low numerical aperture core
- Good efficiency
- Suitable for both 980 nm and 1480 nm pumping
- Pump combiner available for the 20/125 geometry

Applications

- Eye-safe fiber lasers (CW/pulsed) and amplifiers operating in 1.55 - 1.6 µm region
- LIDAR
- Medical
- Sensing

Proven Performance

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Typical Device Performance

Fiber		LIEKKI [™] Er60-20/125DC	LIEKKI [™] Er60-40/250DC
Optical			
Cladding Absorption at 1530 nm	dB/m	1.5 ± 0.3	1.5 ± 0.3
Cladding Absorption at 980 nm	dB/m	(0.5)	(0.5)
Core Numerical Aperture (nominal)	nm	0.09 ± 0.01	0.09 ± 0.01
Geometrical and Mechanical			
Core Diameter		20 ± 2	40 ± 3
Core Concentricity Error	μm	< 1.5	< 2.5
Cladding Diameter	μm	125 ± 2	250 ± 10
Cladding Geometry	μm	Octagonal	Octagonal
Coating Diameter	μm	245 ± 15	350 ± 15
Coating Material		Low Index Acrylate	Low Index Acrylate
Proof Test	Kpsi	> 100	> 100