

Lensed Fiber Technology

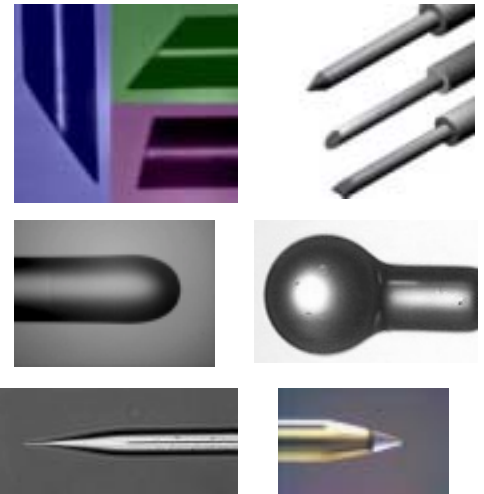
LaseOptics Lensed Fibers are rapidly becoming the method of choice for interfacing optical fiber to active devices and waveguides. Lensing technology provides highly efficient couplings and collimating while consuming a fraction of the space and costs of bulk optic alternatives.

LaseOptics telecommunications' proprietary laser fusion shaping technology enables high-end lenses to be manufactured in volume at low costs. The laser quickly shapes the fiber tip into a precise geometry using an optimized numerical solution based on the targeted far-field profile. In-line far-field monitoring ensures repeatability and high coupling efficiency.

This technology provides 12 times the throughput of conventional mechanical methods. Furthermore, the yield loss from laser shaping is less than one percent, compared to 10-20 percent for mechanical matching. These exceptional yields allow high-value fiber of PM, FBG fiber, metallized fiber to be lensed at minimal costs while maintaining process flow flexibility.

LaseOptics Advanced Fiber Assembly platform allows OEMs to consolidate suppliers of metallized fiber, hermetic sleeves, AR coatings, Lensing, Fiber Bragg Gratings and connectorization into a single source for the entire pigtail assembly.

LaseOptics offer different spot sizes, shapes of single mode and multi mode according to customers' specifications. Additionally we are producing tapered fibers for other applications.



FEATURES:

- Increased Coupling Efficiency**
- Increased Performance**
- Increased Reliability**
- Increased Reproducibility**
- Increased Value & Flexibility**

APPLICATIONS:

- Laser Coupling Assembly**
- MEMS & VCSEL's**
- Pump Modules & Collimating**
- Bio-Medical & Sensors**

Fiber Type	SMF-28, 50/125, 62.5/125...or Multi Mode; PM
Jacket, Protection Type	250µm Bare Fiber, 900µm Tube, 3mm Jacket
Connector Type	FC/PC, FC/APC, SC, ST, SMA, LC
Strip-off Length (mm)	7 ±1mm Typical; or otherwise specified
Operation Wavelength Range	400nm – 1700nm
Spot Size (µm)	1-12 (µm) Typical
Focal Length/Working Distance (µm)	5-500 (µm) Typical
Tapering Angle (degree)	30- 170
Ferrule Accessories, V-Groove	Kovar Ferrule, Steel Ferrule or Silica V-Groove
Radius of Lensed Fiber-End Surface (µm)	5-50 (µm)
End Surface Coating	Option: AR or Mirror

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LaseOptics: Laser applications in science & engineering with Optics