

Press Release

Optical Fibers with Shaped End Surfaces

Side-Fire Fibers for Medical Technology

Optical fibers transmit light which is generally coupled out in the direction of the fiber. LASER COMPONENTS presents side-fire fibers whereby the light is coupled out almost perpendicular to the fiber axis at the fiber tip. The end surface of side-fire fibers feature an angle of approximately 42°.

This is possible because of optical fibers with shaped end surfaces. A laser is used to shape the fiber tips. To prevent the sensitive fiber tips from breaking upon use, they are protected by a glass dome. This is hermetically mounted to the fiber tip with the laser as well.

Side-fire fibers are an important tool in laser medicine. They are used in the removal of tissue in hollow organs; for example, these fibers are used in the treatment of prostate enlargements. The diameters of these special fibers are so small that they can be inserted into the body endoscopically without a problem until the area of treatment is reached.

An SMA connector is normally mounted on the coupling side. Depending on the customers' requirements, other connectors can also be assembled.

More Information

<http://www.lasercomponents.com/de-en/product/optical-fiber-tips/>

Trade Shows

Security + Defence, Sept., 24 - 25, 2013, Internat. Congress Center Dresden, Germany, **Booth 304**
enova - OPTO, Oct., 08.-10., 2013, Paris Porte de Versailles, France, **Booth L9**
PHOTONEX 2013, Oct., 16.-17., 2013, Ricoh Arena, Coventry, UK, **Booth D20**
BIOS EXPO 2014, Feb., 01.-02., 2014, The Moscone Center, San Francisco, USA, **Booth 8517**
Photonics West 2014, Feb., 04.-06., 2014, The Moscone Center, San Francisco, USA, **Booth 517**

The Company

LASER COMPONENTS is specialized in the development, manufacture, and sale of components and services for the laser and opto-electronics industries. With sales offices in four different countries, the company has served its customers since 1982. In-house production at six locations in Germany, Canada, and the USA began in 1986 and is meanwhile responsible for about half of its turnover. Currently, the family-run business employs more than 150 people worldwide.