

6<sup>th</sup> May

2014



## Press Release

### Optical Fibers with Sculped End Faces

#### Fiber Tips with Diffusor for Medical and Industrial Applications

Fiber tips are microcomponents that are formed directly at the end of an optical fiber to change its emission behavior.

The interest in such optical fiber tips is growing significantly: This technology is becoming standard in many medical and industrial applications because it increases the efficiency of entire systems. This increase results from the reduction in optical interfaces; in addition, the compact design compared to separate optical systems is also an advantage. Cumbersome adjustment is no longer necessary: fiber tips are adjustment-free. Even external mechanical influences, such as vibrations or temperature fluctuations, do not affect the optical performance.

LASER COMPONENTS presents diffusor tips that disperse the light evenly across the length of the fiber tip. The diffusors are manufactured by carving spiral-shaped grooves into the fiber cladding with the help of CO<sub>2</sub> lasers.

The diffusor tips ensure an even dispersion and are, therefore, well suited for applications like photodynamic therapy or tissue removal in urology.

These fiber tips are manufactured by LASER COMPONENTS' partner Polymicro Technologies in Phoenix, Arizona. Step-index, multi-mode fibers with a numerical aperture of 0.22 or 0.37 and a fiber core diameter > 200 µm are used for this purpose. Different buffer materials, connector types, and claddings are also available.

#### More Information

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

#### Trade Shows

**Optatec 2014**, May, 20. - 22., 2014, Messe Frankfurt, Germany, **Booth E01**  
**ANGA COM**, May, 20. - 22., 2014, Koelnmesse, Germany, **Booth 10.1/T35**  
**Sensor + Test 2014**, Jun., 03. - 05.2014, Messe Nürnberg, Germany, **Booth 12.117**  
**maintain 2014**, Jun., 03.-06.2014, Messe München, Germany, **Booth B6.131**

#### The Company

LASER COMPONENTS specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in four different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the USA. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 160 employees worldwide.

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