

Press Release

PLDs with Microoptics or Fiber Pigtails

Homogeneous Beam Profile in Pulsed Laser Diodes

Inexpensive, energy saving, and easy to use – laser diodes present a viable alternative to conventional lasers. As semiconductor lasers they have a worse beam characteristic than solid state lasers. Therefore, LASER COMPONENTS offers different concepts to shape the beam of pulsed laser diodes.

Pulsed laser diodes with integrated microoptics reduce the divergence of the fast axis to 5 or 10 mrad. LASER COMPONENTS Canada mounts the so-called fast-axis collimation lens, FAC, directly in front of the laser diode chip. Both a PLD and an FAC lens fit together into a tiny, hermetically-sealed TO-18 housing. The housing can withstand acceleration rates of > 1000 g/ms; thus, it meets the standards set by military technology where the components are used for distance measurement.

An almost homogeneous beam distribution in laser diodes can be achieved by mixing the modes in an optical fiber. LASER COMPONENTS has developed pulsed laser diodes with a fiber pigtail that reach an optical output power of up to 100 W. They are ideally suited for medical applications in which a high amount of peak power must be delivered to a point as loss-free as possible.

LASER COMPONENTS' strengths include the quick and inexpensive development of customer-specific pulsed laser diodes - special customer requests are implemented with pleasure.

Legend

Get a homogeneous beam profile with fiber-coupled PLDs

More Information

<http://www.lasercomponents.com/de-en/lasers/laser-diodes/pulsed-laser-diodes/>

Trade Shows

BiOS 2013, Feb, 2-3, 2013, Moscone Center, San Francisco, USA, **Booth 8517**
Photonics West 2013, Feb, 5-7, 2013, Moscone Center, San Francisco, USA, **Booth 517**
Defense, Security + Sensing, 29.04. - 03.05.2013, Baltimore Convention Center, USA, **Booth 1237**
LASER. World of Photonics, 13.-16.05.2013, Neue Messe München, Germany, **Booth B1.442**

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 140 people worldwide.