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Press Release

Solarization-resistant Fibers from Polymicro Technologies, Inc.

Optical Fibers for UV Applications

The transmission of ultraviolet radiation with optical fibers is a priori problematic due to the material properties of quartz fibers. High UV radiation intensities cause photothermal damage. Attenuation and scattering in the fibers quickly increase by a significant amount. LASER COMPONENTS now offers solarization-resistant fibers that transmit UV radiation even after continuous application.

To get the best UV fiber stabilty, the fiber should regenerate for hours after its first exposure to UV radiation. During this period of regeneration part of the initial solarization damage is permanently repaired. The state of the fiber achieved after regeneration remains the same upon further exposure to radiation! Three fiber types are available from the partner Polymicro Technologies:

The FVP-UVM version is an inexpensive standard UV fiber and is available in many diameters and different buffer materials.

The FVP-UVMI fiber is H_2 enhanced. When used with UV light losses are barely experienced. At 214 nm, transmission stability was recorded for more than 8 hours. It also transmits reliably at wavelengths of less than 200 nm. The fiber has to be put to use almost immediately after delivery because it loses its hydrogen concentration with time and turns into an FVP-UVM fiber.

For the deep UV range – as low as 190 nm – an FDP fiber is recommend. It has minimal solarization characteristics and a long life expectancy.

Weitere Informationen

http://www.lasercomponents.com/de-en/product/deep-uv-fibers/

Trade Shows

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.

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