

Press Release

New World Record: Up to 650 Watts at 905 nm in a TO-18 Housing Peak Performance of Pulsed Laser Diodes at 650 W

LASER COMPONENTS Canada has set a new world record with its pulsed laser diodes at 905 nm: peak power levels of up to 650 W emitted from a small TO-18 housing and are available on a standard basis.

These PLDs are based on "multi-junction" laser technology: This special laser technology contains several epitaxially integrated emitters with a total emitting area of 200 $\mu m \times 10~\mu m$. At a pulse length of 150 ns, it is possible to achieve a peak performance of at least 70 W from a single chip. The metal housing allows a higher thermal load, which permits overdriving the diode and ultimately leads to the achievement of an output of up to 650 W from a stacked array design. Due to the combination of a small emitter area and an extremely high peak performance, the new 3J08 series is optimally suited for fiber coupling.

These pulsed laser diodes are used in low-level laser therapy, among other things. This is an alternative (veterinary) medical treatment that is carried out using monochromatic and coherent light. The goal of treatment is to reduce pain, accelerate the healing of wounds, and fight infections.

Further areas of application include rangefinding, speed guns, laser radar, security scanners, laser light curtains, and test and measurement systems.

More Information



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.