



The new PLPM4 450 offers 50 W blue laser light out of a single package



Light is OSRAM







The power of simplicity: 50 W blue laser light out of a single package

Unique 50 W optical output power: the new laser module PLPM4 450 from OSRAM Opto Semiconductors greatly simplifies the construction of professional laser projectors. For the first time up to 20 blue laser chips have been packaged into a compact housing. In addition, the optical power of the individual chips has been doubled, thus achieving a total power of 50 watts and enabling projectors over 2,000 lumens of brightness with only one housing.

Features

- Butterfly package with 50 W optical output power at Tcase 65 °C
- Up to 5 multimode laser chips in series connection bonded on 4 bars
- Each bar can be operated individually
- Wavelength: 450 nm +/-10nm
- Typ. wall plug efficiency of 35 % at 25 °C Tcase
- ESD protection diode for each laser chip
- Operation temperature: 10 °C up to 70 °C

Advantages

Multi-Die Package will facilitate integration into projectors due to:

Assembly

Reduced assembly time due to handling of less components. Up to 20 laser chips are combined in a single package. **Optical Alignment**

Optical Alignmen

Complexity of optical alignment is dramatically reduced: Only a single multi lens array is required for beam collimation. **Form factor**

Multi-Die Package is a highly integrated package offering an unique small size.

Technical data

| | Multi-Die Package PLPM4 450 |
|----------------------|--|
| Dimension | 25.5 mm x 35 mm (Emitting surface 16 mm x 16.5 mm) |
| Optical output power | 50 W (at 65 °C case temperature) |
| Wavelength | 450 nm ± 10 nm |
| Lifetime (L50) | 20,000 hours @ Tcase 65 °C & 50 W |

PLPM4 450: The first multi-die laser package that provides 50 W blue light output for professional projectors with more than 2,000 lumens of brightness

Multi-Die PLPM4 450 on the Internet: www.osram-os.com/multi-die-laser

Asia

OSRAM Opto Semiconductors (China) Co.,Ltd. 28/F Harbour Ring Plaza No. 18 Xi Zang Middle Road Shanghai 200001 P.R. China Phone: +86 21 53852669 Fax: +86 21 5385 2868 E-mail: prasia@osram-os.com

Europe

OSRAM Opto Semiconductors GmbH Leibnizstraße 4 D-93055 Regensburg, Germany Phone: +49 941 850 1700 Fax: +49 941 850 3302 E-mail: support@osram-os.com

USA

OSRAM Opto Semiconductors Inc. 1150 Kifer Road, Suite 100 Sunnyvale, CA 94086, USA Main Phone number: (408) 962-3700 Main Fax: (408) 738-9120 Inbound Toll Free: (866) 993-5211 E-mail: info@osram-os.com

