



Light is powerful

Multi-Die Laser Package for Projectors

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

Light is **OSRAM**

OSRAM
Opto Semiconductors



PLPM4 450: new brilliant perspectives for professional laser projector design



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

Unique 50W 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 50W 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

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 & 50W

PLPM4 450: The first multi-die laser package that provides 50W 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

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