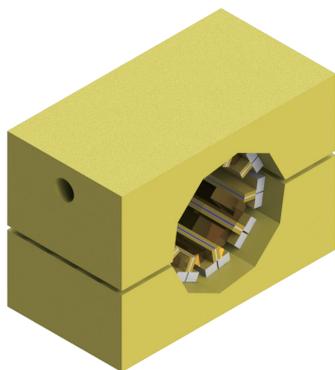


CA01 Series Circular Conduction-Cooled Diode Laser Array



The CA01 series circular conduction-cooled diode laser array is a high peak power product developed by RealLight for operation at high temperatures up to 60°C. This series is composed of multiple bars arranged in a circular configuration, with a power of 100W/200W per bar. Other wavelengths and packaging forms can be customized.

Key Features

- ◆ AuSn solder for packaging
- ◆ High temperature application
- ◆ High peak power
- ◆ High reliability

Applications

- Pumping source
- Illumination
- Laser processing
- Scientific research

Technical Specifications

Optical Parameters	
Center Wavelength λ_c (nm)	790~812
Wavelength Tolerance $\delta\lambda_c$ (nm)	± 3
Output Power per Bar (W)	100 200
Number of Horizontal Arrays	customized
Array-to-Array Pitch	customized
Number of Bars per Stack	customized
Bar-to-Bar Pitch (mm)	customized
Spectral Width (FWHM) (nm)	<6
Fast Axis Divergence Angle (FWHM) (°)	≤ 40
Slow Axis Divergence Angle (FWHM) (°)	≤ 10
Wavelength Temperature Coefficient (nm/°C)	~ 0.3
Electrical Parameters	
EO Conversion Efficiency (%)	≥ 50
Threshold Current I_{th} (A)	≤ 20 ≤ 30
Operating Current I_{op} (A)	100 220
Operating Voltage V_{op} of each Bar (V)	≤ 2.1
Duty Cycle (%)	<0.8%
Pulse Width (μs)	≤ 300
Repetition Rate (Hz)	≤ 25 ≤ 20
Environment Parameters	
Operating Temperature (°C)	-40~65
Storage Temperature (°C)	-45~85

1. Wavelengths from 940nm to 960nm available upon request.
2. The installation and wiring can be customized to meet the customer's requirements.
3. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

Mechanical Drawings (in mm)

