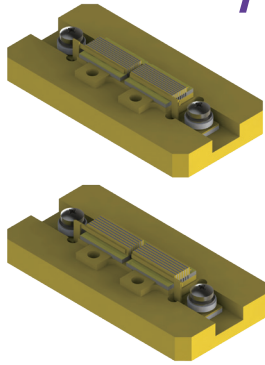


AA-2 Series Conduction-cooled Diode Laser Array



AA-2 series conduction-cooled diode laser array is developed by RealLight which is used for wide temperature. Its features include high peak power and wide temperature applications.

Key Features

- ◆ Hard solder package
- ◆ High temperature application
- ◆ High peak power
- ◆ High reliability
- ◆ Dual wavelength integration

Applications

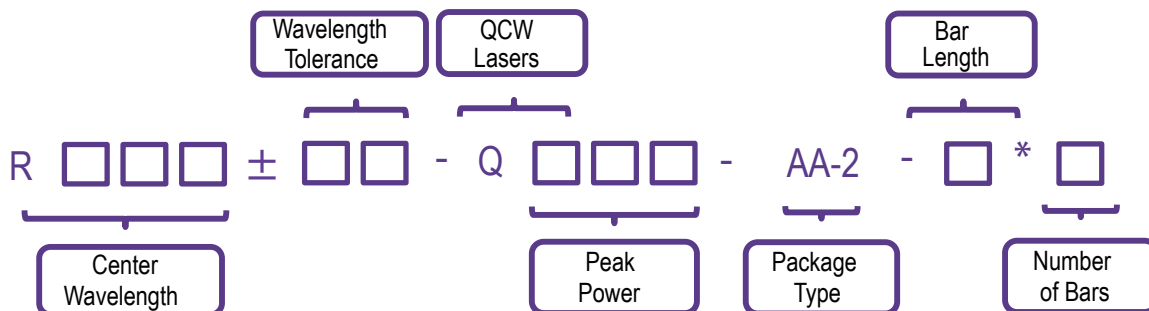
- Pumping source
- Scientific research

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 Bars per Stack	8	6
Bar-to-Bar Pitch (mm)	0.43	0.55
Emission Area (mm×mm)	3×21	2.75×21
Stack-to-Stack Pitch (mm)	1	
Number of Stacks	2	
Spectral Width per Wavelength (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 (%)	$\leq 0.8\% @ 1600W$	$\leq 0.6\% @ 2400W$
Pulse Width (μs)	≤ 300	
Repetition Rate (Hz)	1-25	1-20
Environment Parameters		
Operating Temperature (°C)	-40~65	
Storage Temperature (°C)	-45~85	

1. Wavelengths from 940nm to 960nm available upon request.
2. Custom number of bars, bar-to-bar pitch, and stack-to-stack pitch are available upon request.
3. The installation and wiring can be customized to meet the customer's requirements.

Part Numbering Schema



Mechanical Drawings (in mm)

