AA-4 Series Conduction-cooled Diode Laser Array



AA-4 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

Technical Specifications

Applications

Pumping source Scientific research

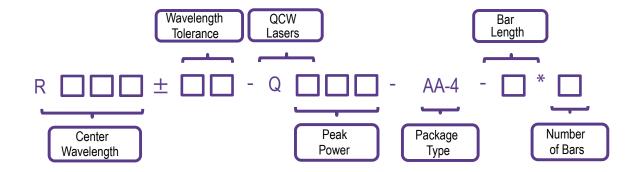
Optical Para	ameters		
Center Wavelength λ _c (nm)	790-812		
Wavelength Tolerance δλ _c (nm)	±3		
Output Power per Bar(W)	100	200	
Number of Bars per Stack	9	7	
Bar-to-Bar Pitch (mm)	0.43	0.55	
Emission Area (mm×mm)	3.5×43	3.3×43	
Stack-to-Stack Pitch (mm)	1		
Number of Stacks		4	
Spectral Width per Wavelength (FWHM) (nm)	≤6		
Fast Axis Divergence Angle (FWHM) (°)	≤40		
Slow Axis Divergence Angle (FWHM) (°)	≤10		
Wavelength Temperature Coefficient (nm/°C)	~0.3		
Electrical Par	rameters		
EO Conversion Efficiency (%)	≥50		
Threshold Current Ith (A)	≤20	≤30	
Operating Current I _{op} (A)	100	220	
Operating Voltage V _{op} of each Bar (V)	≤′2	≤2.1	
Duty Cycle (%)	≤0.8%@3600W	≤0.6%@5600W	
Pulse Width (µs)	≤300		
Repetition Rate (Hz)	1-25	1-20	
Environment P	arameters		
Operating Temperature (°C)	-40	-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)

