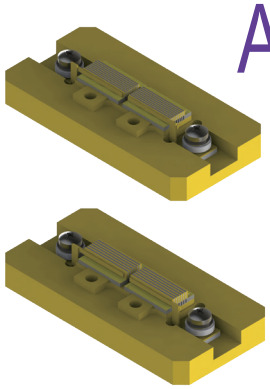


AA-2 Series Conduction-cooled Diode Laser Array

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

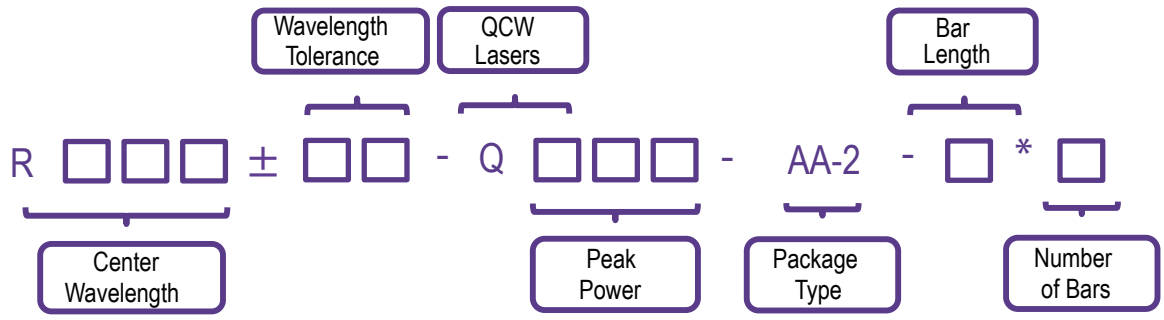
Scientific research

Technical Specifications

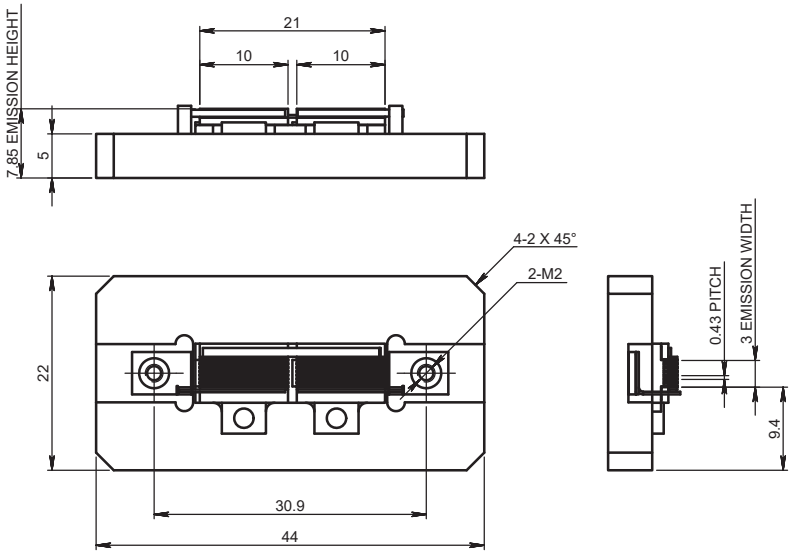
Optical Parameters		
Center Wavelength λ_c（nm）	790-812	
Wavelength Tolerance $\delta\lambda_c$（nm）	±3	
Output Power per Bar（W）	100	200
Number of Bars per Stack	8	6
Bar-to-Bar Pitch（mm）	0.43	0.55
Emission Area（mm×mm）	3×21	2.75×21
Stack-to-Stack Pitch（mm）	1	
Number of Stacks	2	
Spectral Width per Wavelength（FWHM）（nm）	≤6	
Fast Axis Divergence Angle（FWHM）（°）	≤40	
Slow Axis Divergence Angle（FWHM）（°）	≤10	
Wavelength Temperature Coefficient（nm/℃）	~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%@1600W	≤0.6%@2400W
Pulse Width（μs）	≤300	
Repetition Rate（Hz）	1-25	1-20
Environment Parameters		
Operating Temperature（℃）	-40~65	
Storage Temperature（℃）	-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.
4. All the data in the above table are the typical values obtained from the tests at room temperature of 25℃, and the final data is subject to the final test report.

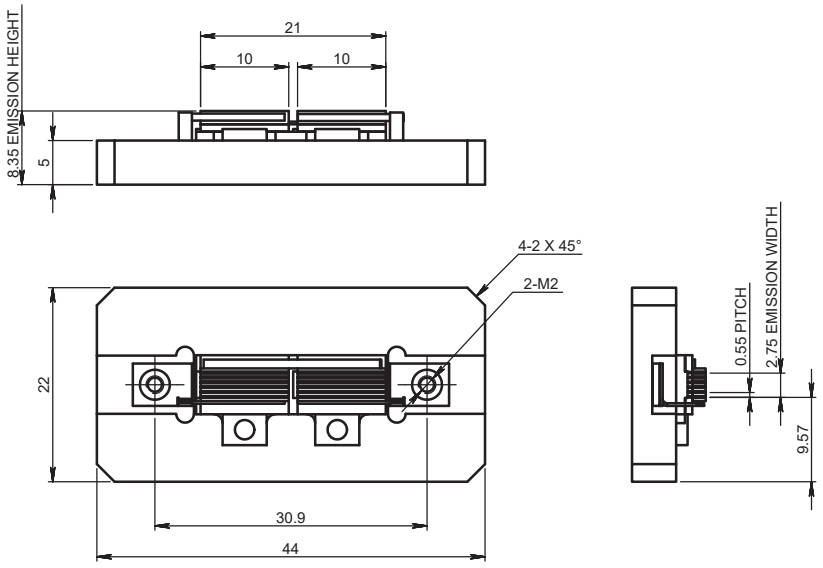
Part Numbering Schema



Mechanical Drawings (in mm)



AA_2×8_0.43_100W



AA_2×6_0.55_200W