

AA Series Conduction-cooled Diode Laser Array



AA 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

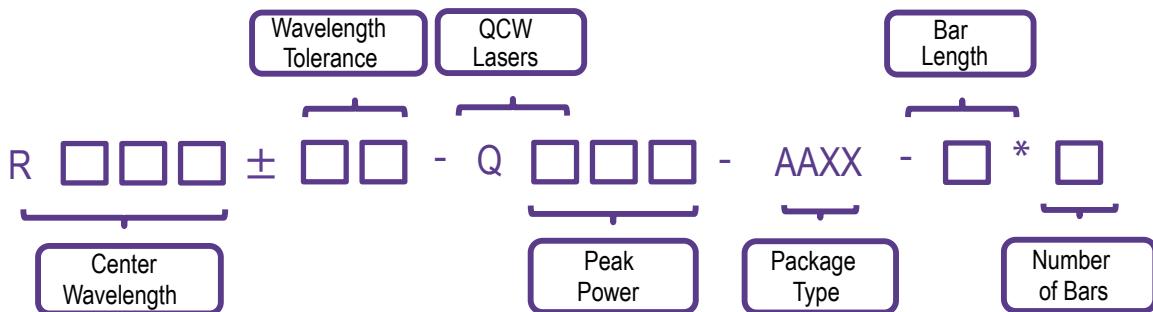
- Pumping source
Scientific research

Technical Specifications

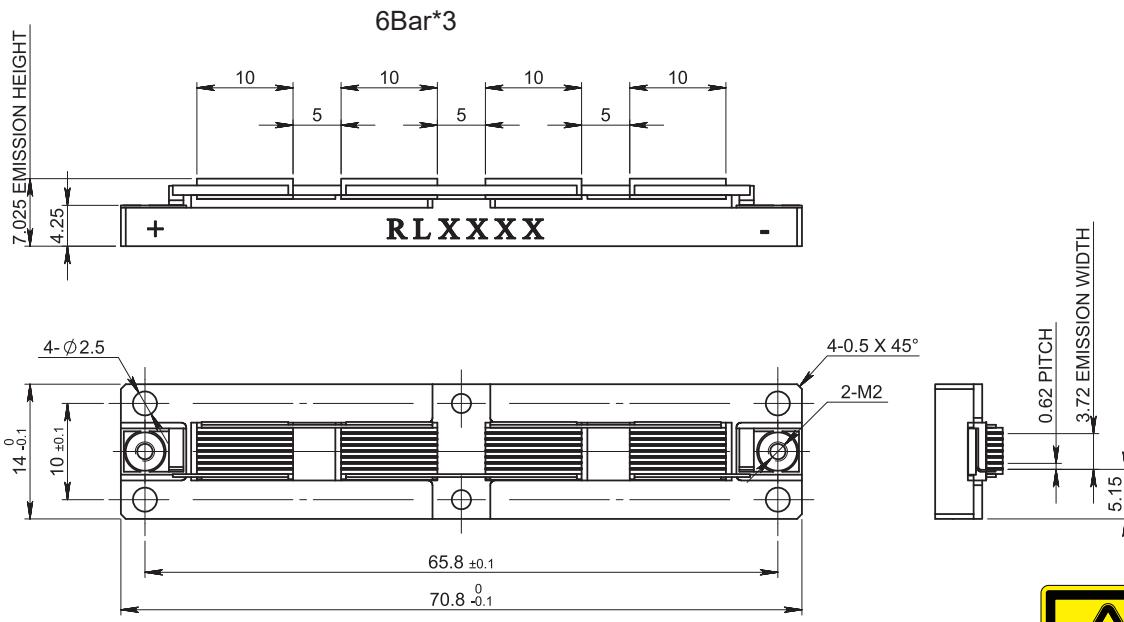
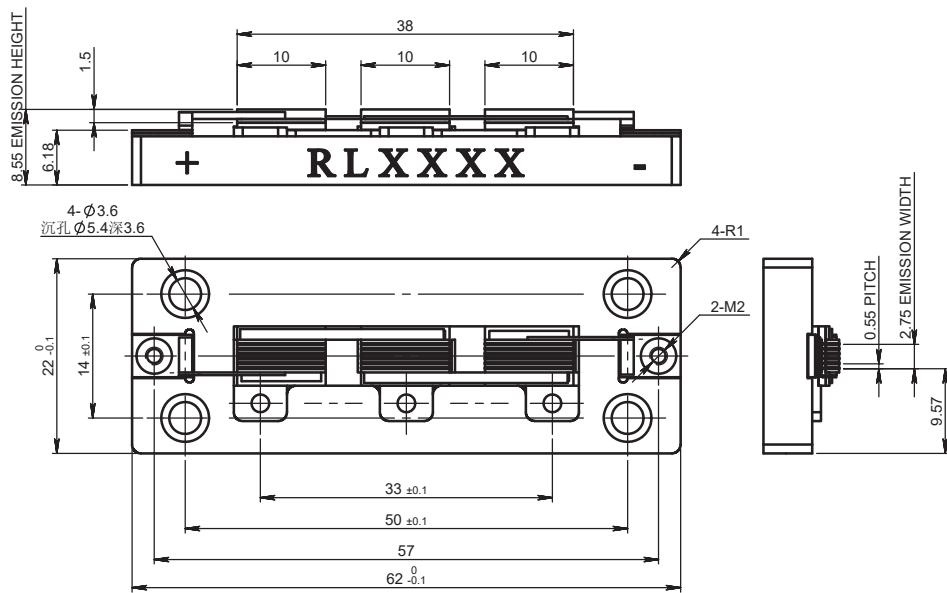
Optical Parameters	
Part Number	RXXX±3-QXXXX-AXXX-10*XX
Center Wavelength λ_c (nm)	796~808
Wavelength Tolerance $\delta\lambda_c$ (nm)	±3
Output Power per Bar (W)	≥200
Bar Numbers of each Stacks	2~12
Bar-to-Bar Pitch (mm)	≥0.4
Spaces between Stacks (mm)	≥0.4
Stack Numbers	≥2
Spectral Width (FWHM) (nm)	<6
Slope Efficiency per Bar (W/A)	>1.1
Fast Axis Divergence Angle (FWHM) (°)	40
Slow Axis Divergence Angle (FWHM) (°)	12
Wavelength Temperature Coefficient (nm/°C)	~0.3
Electrical Parameters	
EO Conversion Efficiency (%)	>50
Threshold Current I_{th} (A)	<35
Operating Current I_{op} (A)	<220
Operating Voltage V_{op} of each Bar (V)	<2.1
Duty Cycle (%)	<0.8
Pulse Width (μs)	<300
Repetition Rate (Hz)	<30
Environment Parameters	
Operating Temperature (°C)	-40~70
Storage Temperature (°C)	-60~80

1. Wavelengths from 940nm to 960nm available upon request.
2. Wavelengths from 792nm to 818nm available upon request.
3. Do not operate it beyond normal operating conditions, otherwise, the service life of the device might be shortened.
4. Operating and storage environment must be free of dew, the cleanliness must reach ISO Class4.
5. The above parameters are measured under QCW mode with pulse width of 200μs and repetition rate of 30Hz at 25°C.

Part Numbering Schema



Mechanical Drawings (in mm)



7Bar*4

