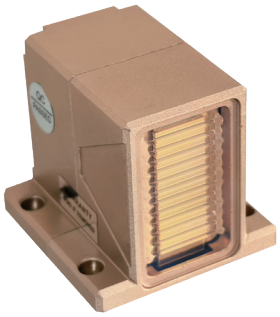


WV10 808nm-600W
Macro Channel Diode Laser Array

Key Features

- 808nm operating wavelength
- 50W single bar
- AuSn soldering
- Macro channel water cooling
- High power density
- High efficiency
- High reliability and stability
- Customizable multi-wavelength solutions

Applications

Hair removal

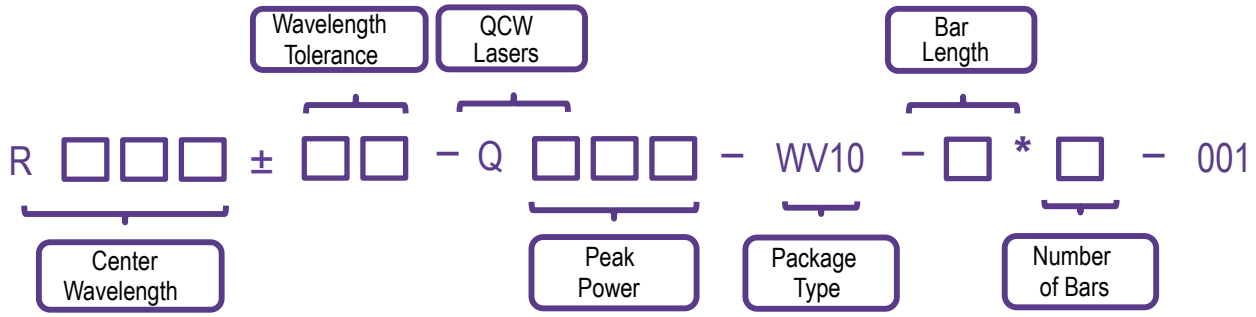
Skin rejuvenation

Technical Specifications

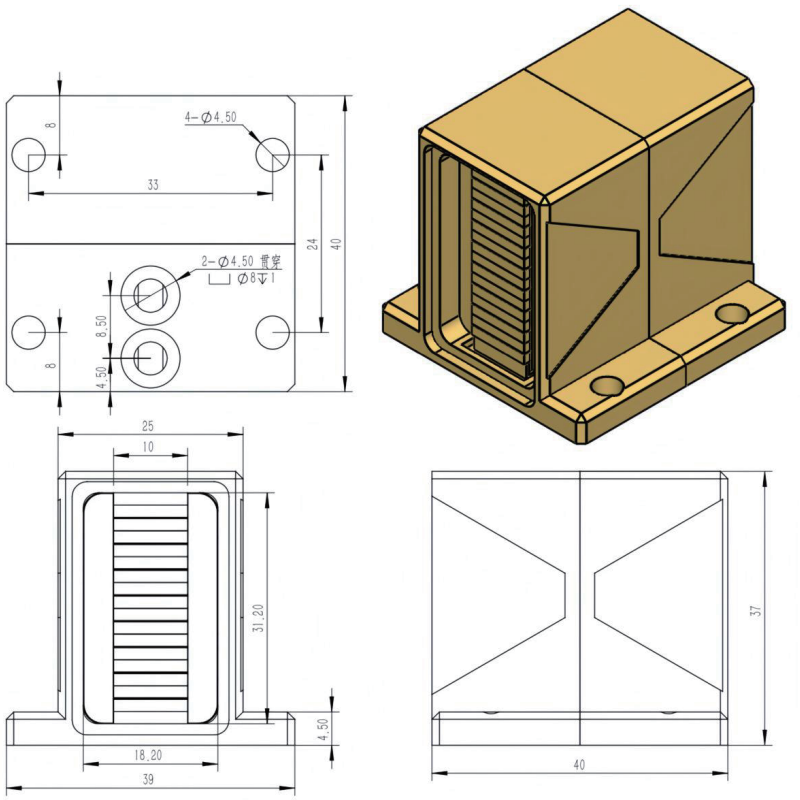
Optical Parameters	
Part Number	R808±15-Q600-WV10-10x12-001
Center Wavelength λ_c（nm）	808
Wavelength Tolerance $\delta\lambda_c$（nm）	±15
Output Power（W）	600
Number of Bars	12
Bar-to-Bar Pitch（mm）	2.18
Spot Size（mm）	10 X 24.00
Fast Axis Full Divergence Angle（FWHM）（°）	78
Slow Axis Full Divergence Angle（FWHM）（°）	20
Wavelength Temperature Coefficient（nm/℃）	~ 0.3
Electrical Parameters	
Operating Current I_{op}（A）	≤50
Threshold Current I_{th}（A）	≤10
Operating Voltage V_{op}（V）	≤24
Slope Efficiency per Bar （W/A）	≥1.1
Power Conversion Efficiency（%）	≥48
Duty Cycle（max., %）	40
Pulse Width（max., ms）[1]	400
Repetition Rate（Hz）	1 ~ 10
Cooling Parameters	
Cooling Water Requirements	Deionized Water or Distilled Water
Water Temperature（℃）[2]	20 ~ 30
Water Pressure（Mpa）	0.25 ~ 0.35
Water Flow Rate（L/min）[3]	3.5 ~ 4.5

1. Since the duty cycle of the module cannot exceed 40% during operation, when the maximum pulse width is 400ms, the repetition frequency can only be 1Hz; when the maximum repetition frequency is 10Hz, the maximum pulse width is 40ms only.
2. Avoid laser operation in condensing environments, ensure ambient temperature exceeds minimum safe operating limits.
3. The water flow rate refers to the flow of cooling water exiting the laser system.
4. Custom wavelengths available upon request.
5. 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)



Notes:

The light-emitting area dimensions in the diagram are for illustrative purposes only. Refer to specs for actual measurements.