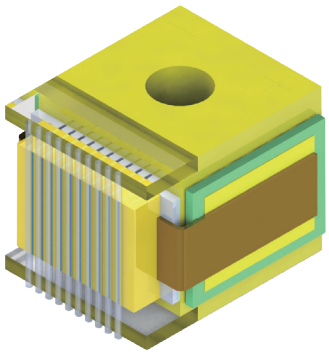
GS06 Conduction-cooled Diode Laser Array



GS06 Conduction Cooled Diode Laser Array is a compact multi-wavelength product developed by RealLight for use at high temperatures of 60°C, with up to 15 bars, output power of 150-200W per bar, bar size of 5mm and optional single-wavelength output.This array is fast-axis collimated with fast axis divergence ≤8°. Other wavelengths and packaging forms can be customized.

Key Features

- AuSn solder for packaging
- Compact design
- High peak power density
- High reliability

Applications

Pumping source

Illumination

Laser processing

Scientific research

Technical Specifications

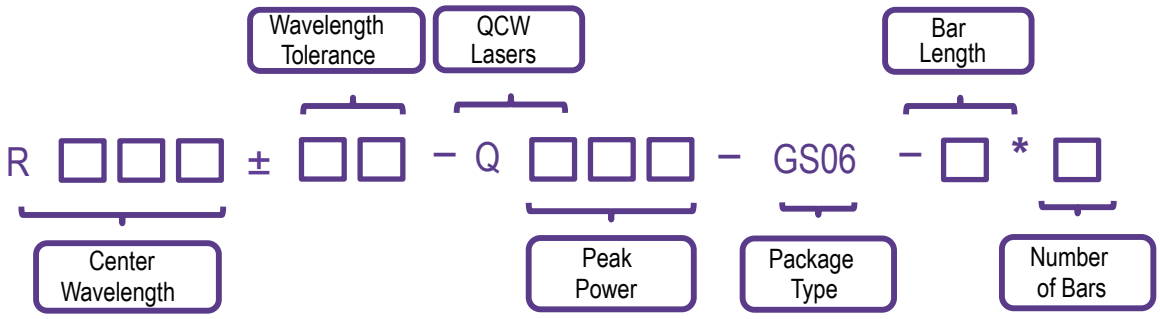
Optical Parameters	
Part Number	Rxxx±5-Q1800-GS06-5*9
Center Wavelength λ_c (nm)	796~808
Wavelength Tolerance $\delta\lambda_c$ (nm)	±5
Output Power per Bar (W)	200
Number of Bars	9
Bar-to-Bar Pitch (mm)	0.6
Spectral Width (FWHM) (nm)	≤5
Slope Efficiency per Bar (W/A)	>1.0
Fast Axis Divergence Angle (FWHM) (typ., °)	8
Slow Axis Divergence Angle (FWHM) (typ.,°)	12
Wavelength Temperature Coefficient (nm/℃)	~0.3
Electrical Parameters	
EO Conversion Efficiency (%)	>48
Threshold Current I_{th} (A)	<27
Operating Current I_{op} (A)	<170
Operating Voltage V_{op} (V)	<2.1
Duty Cycle (%)	<0.8
Pulse Width (μs)	<300
Repetition Rate (Hz)	<30
Environment Parameters	
Operating Temperature (℃)	-40~75
Storage Temperature (℃)	-45~80

1. For different specifications, please contact sales manager.
2. Do not operate it beyond normal operating conditions, otherwise, the service life of the device might be shortened.
3. Operating and storage environment must be free of dew.
4. All above parameters are measured under QCW mode.
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.

Order Information

Package	Wavelength（nm）	Peak Power (W)	Part Number
GS06	796~808	1800	Rxxx±5-Q1800-GS06-5*9

Part Numbering Schema



Mechanical Drawings (in mm)