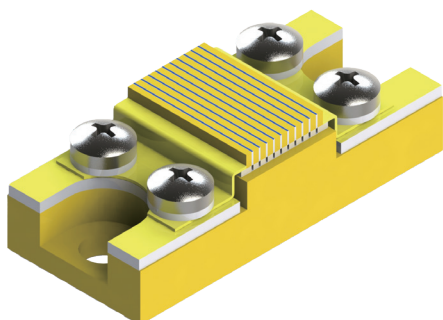


GS15 Conduction-cooled Vertical Stacked Diode Laser Array



GS15 series conduction-cooled vertical stacked diode laser array is Real-Light's self-developed laser component for wide-temperature applications. It is high-peak-power, compact and easy-to-integrate.

Key Features

- ◆ AuSn solder for packaging
- ◆ High peak power
- ◆ High reliability
- ◆ Multi wavelength integration

Applications

Pumping source
Scientific research

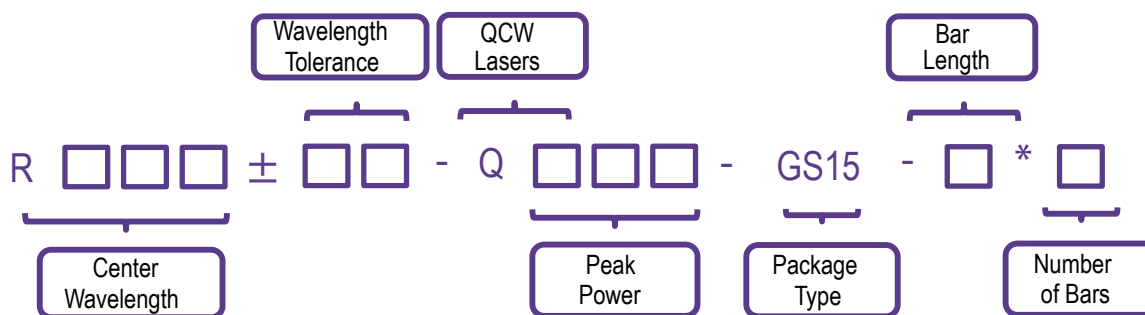
Technical Specifications

Optical Parameters			
Center Wavelength λ_c (nm)	940	790-812	
Wavelength Tolerance $\delta\lambda_c$ (nm)	± 5	± 3	
Output Power per Bar (W)	100	100	200
Number of Bars	1-2	5-12	5-10
Bar Length (mm)	10	10	
Bar-to-Bar Pitch (mm)	0.8	0.43	0.55
Spectral Width (FWHM) (nm)	≤ 5		
Fast Axis Divergence Angle (FWHM) ($^\circ$)	≤ 40		
Slow Axis Divergence Angle (FWHM) ($^\circ$)	≤ 10		
Wavelength Temperature Coefficient (nm/ $^\circ\text{C}$)	≈ 0.35		
Electrical Parameters			
EO Conversion Efficiency (%)	≥ 50		
Threshold Current I_{th} (A)	≤ 20	≤ 20	≤ 30
Operating Current I_{op} (A)	100	100	220
Operating Voltage V_{op} of each Bar (V)	≤ 2.1		
Duty Cycle	$\leq 6\% @ 200W$	$\leq 1\% @ 1200W$	$\leq 0.6\% @ 2000W$
Pulse Width (μs)	≤ 3000	≤ 300	
Repetition Rate (Hz)	1-20	1-30	1-20
Environment Parameters			
Operating Temperature ($^\circ\text{C}$)	-40~65		
Storage Temperature ($^\circ\text{C}$)	-45~85		

Notes:

Different wavelengths, numbers of bars, bar pitches and other specifications are available upon request.

Part Numbering Schema



Mechanical Drawings (in mm)

