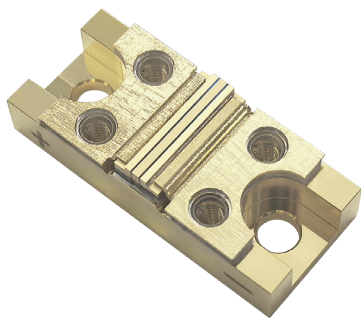


# GS15 Conduction-cooled Vertical Stacked Diode Laser Array



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

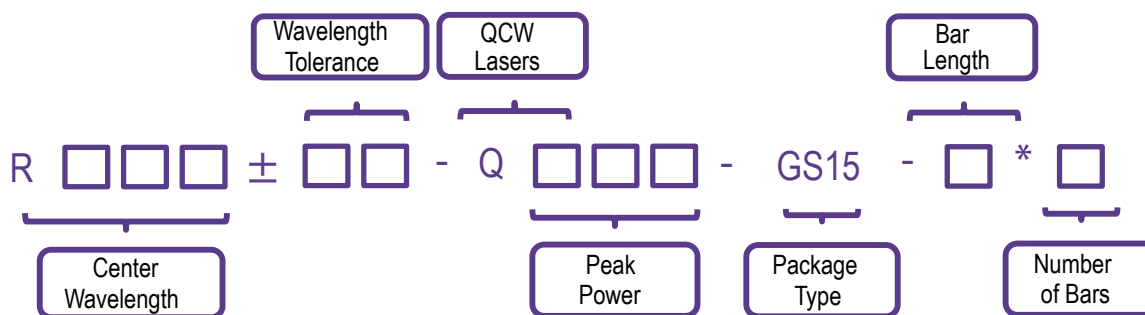
## Technical Specifications

Optical Parameters			
Center Wavelength $\lambda_c$ (nm)	940	790-812	
Wavelength Tolerance $\delta\lambda_c$ (nm)	$\pm 5$	$\pm 3$	
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)	$\leq 5$		
Fast Axis Divergence Angle (FWHM) ( $^\circ$ )	$\leq 40$		
Slow Axis Divergence Angle (FWHM) ( $^\circ$ )	$\leq 10$		
Wavelength Temperature Coefficient (nm/ $^\circ\text{C}$ )	$\approx 0.35$		
Electrical Parameters			
EO Conversion Efficiency (%)	$\geq 50$		
Threshold Current $I_{th}$ (A)	$\leq 20$	$\leq 20$	$\leq 30$
Operating Current $I_{op}$ (A)	100	100	220
Operating Voltage $V_{op}$ of each Bar (V)	$\leq 2.1$		
Duty Cycle	$\leq 6\% @ 200W$	$\leq 1\% @ 1200W$	$\leq 0.6\% @ 2000W$
Pulse Width ( $\mu\text{s}$ )	$\leq 3000$	$\leq 300$	
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)

