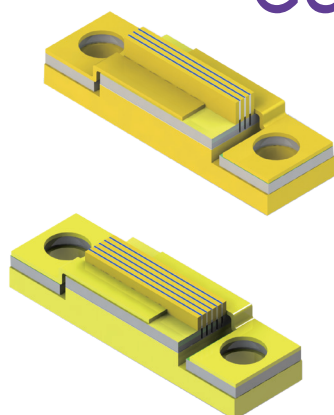


GS12 Conduction-cooled Vertical Stacked Diode Laser Array



GS12 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

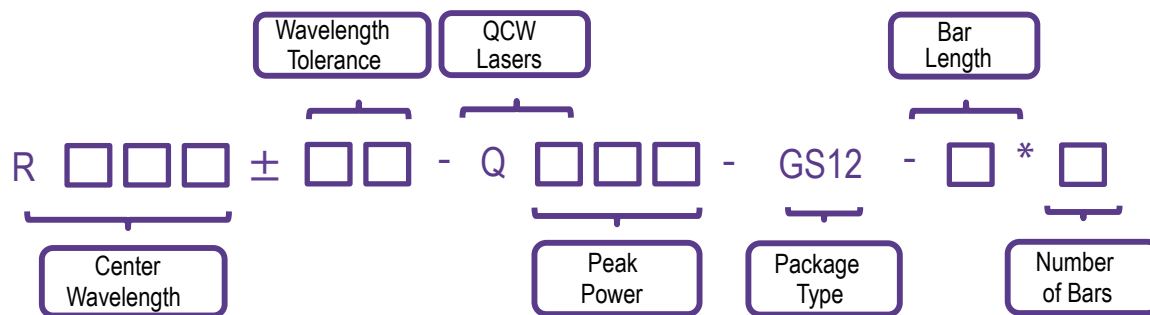
Pumping source
Scientific research

Technical Specifications

Optical Parameters	
Part Number	RXXX±3-QXXXX-GS12-10*XX
Center Wavelength λ_c (nm)	796~808
Wavelength Tolerance $\delta\lambda_c$ (nm)	±3
Output Power per Bar (W)	≥200 ≥100
Number of Bars	1~5
Bar-to-Bar Pitch (mm)	~0.43
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 <15
Operating Current I_{op} (A)	<220 <120
Operating Voltage V_{op} of each Bar (V)	<2.1
Duty Cycle (%)	<0.8
Pulse Width (μ s)	<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 200 μ s and repetition rate of 30Hz at 25°C.

Part Numbering Schema



Mechanical Drawings (in mm)

