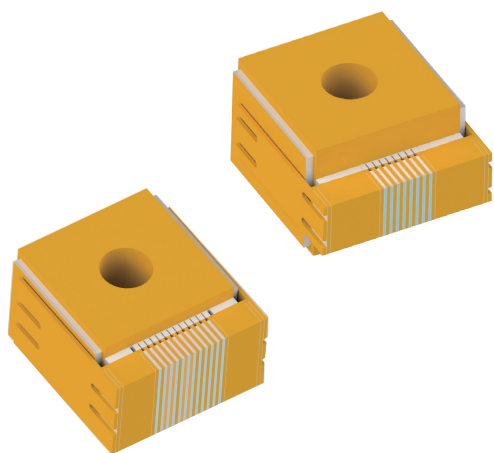


GS04 Conduction-cooled Vertical Stacked Diode Laser Array



GS04 conduction-cooled vertical stacked diode laser array is Reallight's self-developed component in μs -level applications, which features compact design, high power density, and small emitting size.

Key Features

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

Applications

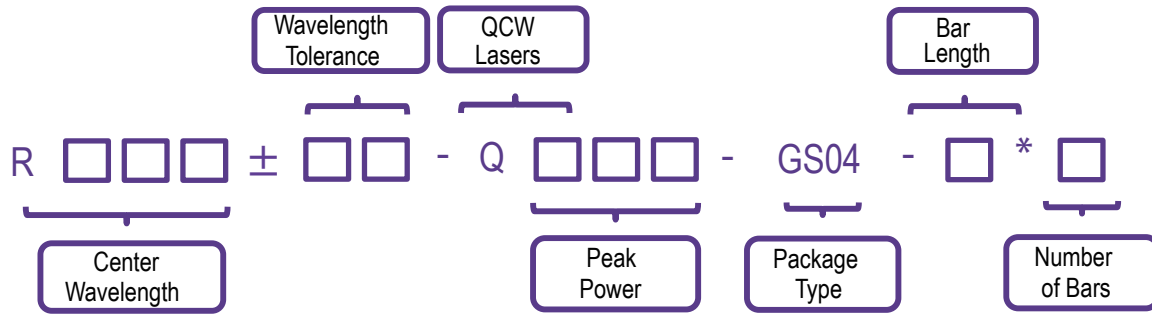
Pumping source
Scientific research

Technical Specifications

Optical Parameters		
Part Number	R808 \pm 3-Q640-GS04-3*8	R808 \pm 3-Q1200-GS04-5*12
Center Wavelength λ_c (nm)	808	
Wavelength Tolerance $\delta\lambda_c$ (nm)	± 3	
Output Power per Bar (W)	80	100
Number of Bars	8	12
Bar-to-Bar Pitch (mm)	~ 0.4	
Spectral Width (FWHM) (nm)	< 5	
Slope Efficiency per Bar (W/A)	> 1.0	
Fast Axis Divergence Angle (FWHM) ($^\circ$)	40	
Slow Axis Divergence Angle (FWHM) ($^\circ$)	10	
Wavelength Temperature Coefficient (nm/ $^\circ\text{C}$)	~ 0.3	
Electrical Parameters		
EO Conversion Efficiency (%)	> 48	
Threshold Current I_{th} (A)	< 12	< 17
Operating Current I_{op} (A)	< 85	< 130
Operating Voltage V_{op} of each Bar (V)	< 2	
Duty Cycle (%)	< 0.8	
Pulse Width (μs)	< 300	
Repetition Rate (Hz)	< 30	
Environment Parameters		
Operating Temperature ($^\circ\text{C}$)	0~45	
Storage Temperature ($^\circ\text{C}$)	0~55	

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. Make sure that there is no condensation in operating or storage environment.
5. All above parameters are measured in QCW mode.

Part Numbering Schema



Mechanical Drawings (in mm)

