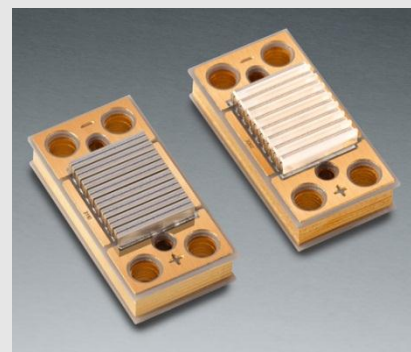


808nm, Conduction-Cooled, QCW, Vertical Diode Laser Stack

Features

- Compact and planar design
- Center hole for module alignment
- High environmental temperature range
- High output power bar



Device Specification

Optical Parameters ¹		Units
Center Wavelength Range ³	nm	808
Center Wavelength Tolerance	nm	±3
Output Power per Bar ^{2, 5}	W	250
Number of Bars ³	#	up to 8
Bar-to-Bar Spacing ³	mm	1.7
Spectral Width (FWHM) ⁵	nm	<5
Slope Efficiency per Bar	W/A	>1.25
Fast-Axis Divergence without Optics	degree	70
Fast-Axis Divergence with Fast-Axis Collimation	mrad	<8
Slow-Axis Divergence	degree	<10
Wavelength Temp. Coefficient	nm/°C	0.27

Electrical Parameters ¹		
Power Conversion Efficiency	%	>55
Threshold Current (I_{TH})	A	<26
Operating Current (I_{OP})	A	<250
Operating Voltage per Bar (V_{OP})	V	<2
High Duty Cycle	%	2

Thermal Parameters		
Operating Temperature Range ^{3,4}	°C	+20 to +35
Storage Temperature Range ⁴	°C	0 to +55
Recommended Heatsink Capacity per Bar	W	>20

¹Data at 20°C cold water temperature.

²Reduced lifetime if used above nominal operating conditions.

³Custom configurations on request.

⁴A non-condensing environment is required for storage and operation below the ambient dew point.

⁵QCW, <2% duty cycle, <500µsec at 808nm, <2m sec at 940nm, 2% duty cycle, <200µsec at 1940nm.

DILAS
The diode laser company.



DI-102012