

940nm, 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	940
Center Wavelength Tolerance	nm	±3
Output Power per Bar ^{2, 5}	W	300
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	0.31

Electrical Parameters ¹		
Power Conversion Efficiency	%	>55
Threshold Current (I_{TH})	A	<26
Operating Current (I_{OP})	A	<300
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.

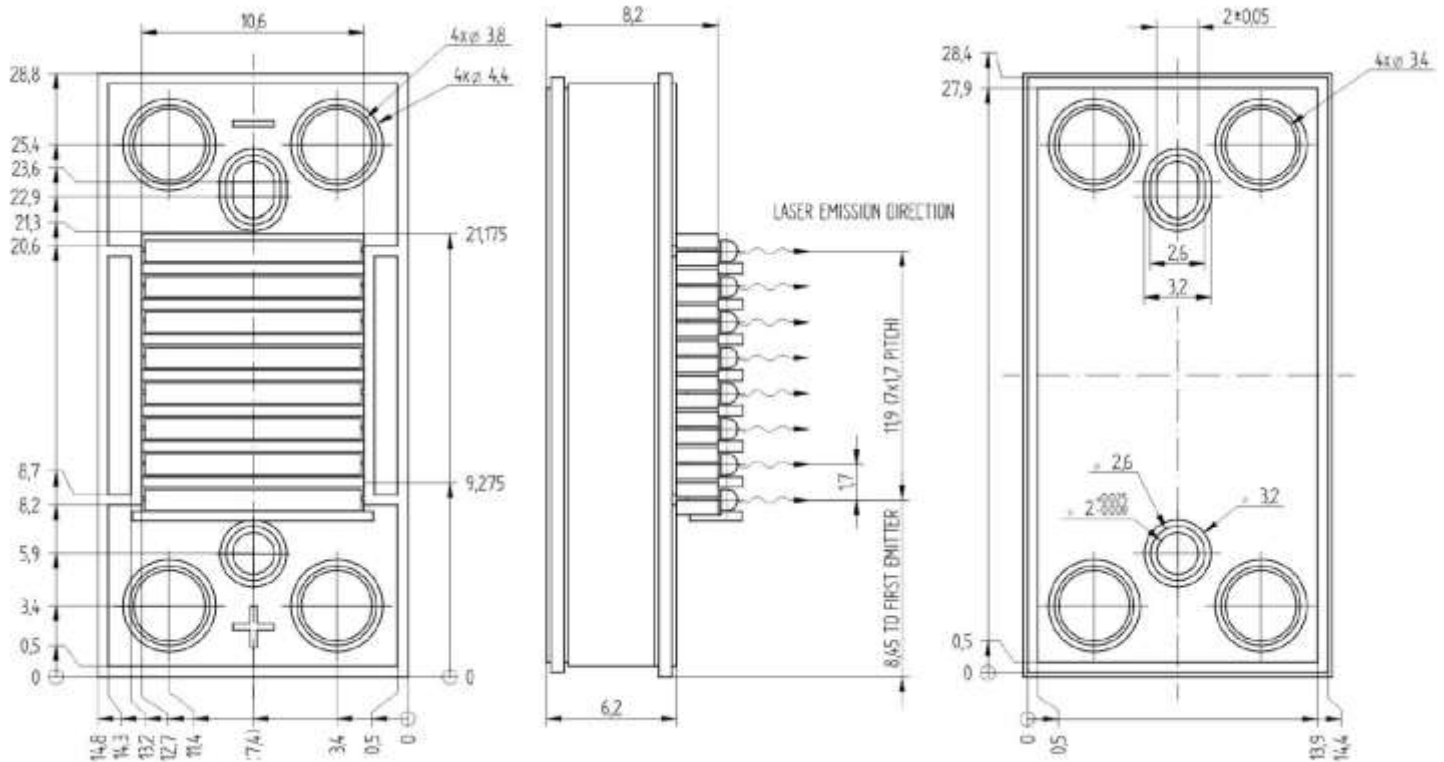
³Custom configurations on request.

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.

940nm, Conduction-Cooled, QCW, Vertical Diode Laser Stack

Package Dimension



©2012 DILAS. All rights reserved. DILAS reserves the right to change product specifications without notice. For handling precautions, please reference the general handling instruction manual.

For complete details, please contact your local DILAS sales representative or visit our website at www.DILAS.com.

Europe
DILAS Diodenlaser GmbH
Galileo-Galilei-Straße 10
55129 Mainz
Germany
Phone: +49 (6131) 9226 0
Fax: +49 (6131) 9226 257
Email: sales@DILAS.de

North America
DILAS Diode Laser, Inc.
9070 South Rita Road
Suite 1500
Tucson, AZ 85747
Phone: +1 (520) 232-3484
Fax: +1 (520) 232-3499
Email: sales@DILAS-INC.com

Asia
DILAS Diodenlaser GmbH
China Sales Office
Room 206, Sunplus Technology, Bldg. 2
No. 1077 Zu Chongzhi Road
Hi-Tech Park, Shanghai 201203,
P.R. China
Phone: +86 (0) 21-6855-2216
Fax: +86 (0) 21-5027-3793
Email: sales@dilas-china.com.cn