

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

Features

- Low vertical height
- Compact size
- Also available in AuSn solder technology



Device Specification

Optical Parameters ¹		Units	QCW		
Center Wavelength Range ³	nm		808		
Center Wavelength Tolerance	nm	±3	±3		±3
Output Power per Bar ^{2, 5}	W	100	150		250
Number of Bars ³	#	6 to 20	6 to 20		6 to 20
Bar-to-Bar Spacing	mm	>0.4	>0.4		>0.4
Spectral Width (FWHM)	nm	<5	<5		<5
Slope Efficiency per Bar	W/A	>1.00	>1.00		>1.25
Fast-Axis Divergence	degree	70	70		70
Slow-Axis Divergence	degree	<12	<12		<10
Wavelength Temp. Coefficient	nm/°C	0.27	0.27		0.27

Electrical Parameters ^{1, 5}					
Power Conversion Efficiency	%	>50	>50		>55
Threshold Current (I_{TH})	A	<15	<15		<30
Operating Current (I_{OP})	A	<120	<170		<250
Operating Voltage per Bar (V_{OP})	V	<2	<2		<2

Thermal Parameters					
Operating Temperature Range ^{3,4}	°C	+20 to +45	+20 to +45		+20 to +45
Storage Temperature Range ⁴	°C	0 to +55	0 to +55		0 to +55
Recommended Heatsink Capacity per Bar	W	>20	>20		>30

¹Data at 20°C cold plate temperature, unless otherwise stated.

²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

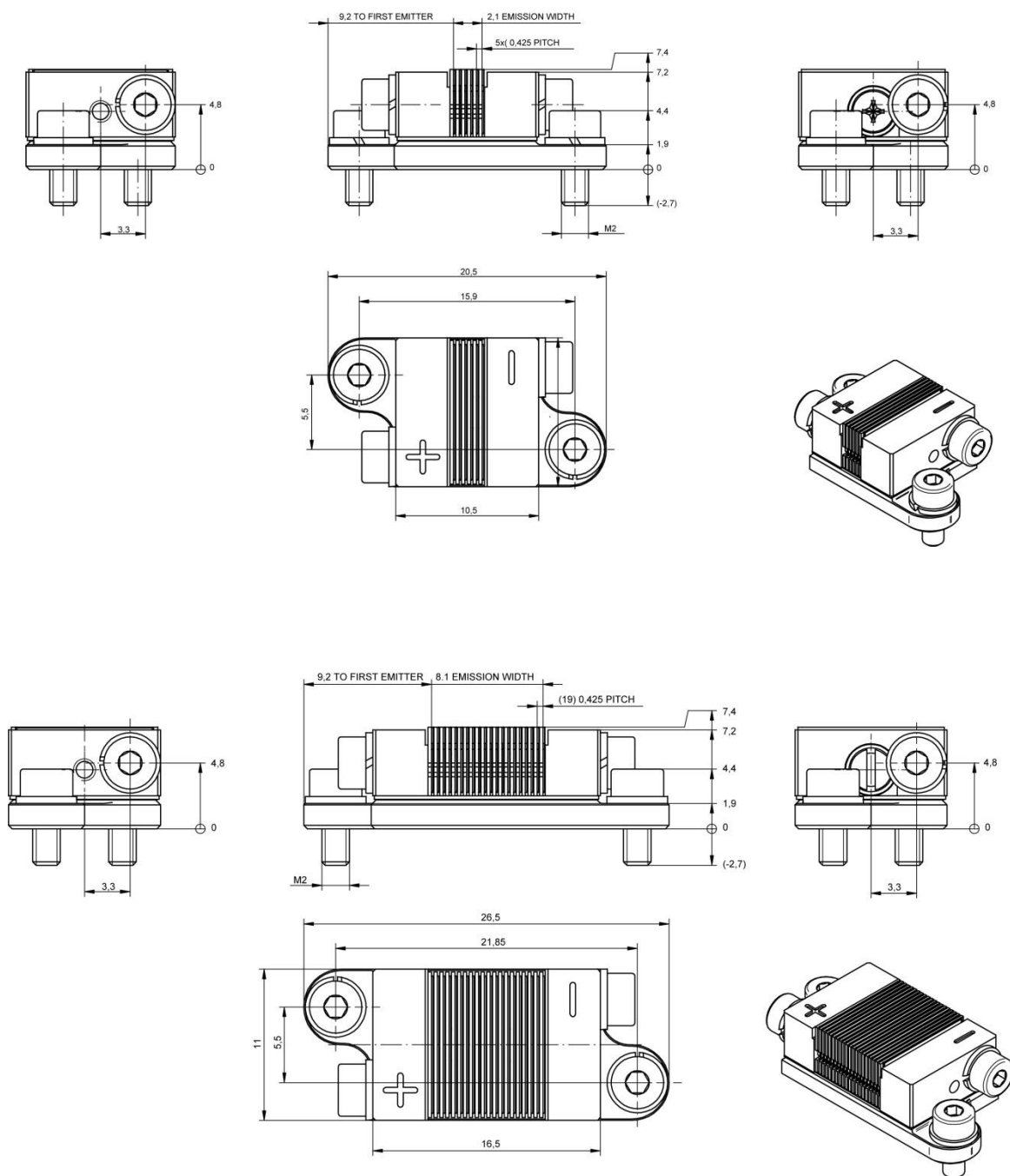
⁴A non-condensing environment is required for storage and operation below the ambient dew point.

⁵QCW, <2% Duty Cycle, <500µsec.

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

Package Dimension

Examples of back-plane cooled QCW Vertical Diode Laser Stack with 1x6 and 1x20 diode lasers bars. Consult DILAS for other package dimensions.



©2013 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 (0)6131 9226 0
Fax: +49 (0)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) 232-3480
Fax: +1 (520) 232-3499
Email: sales@DILAS-INC.com

China & Taiwan

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