

Conduction Cooled Diode Laser Single Bar Series

Features

- Very low smile
- Available as non-collimated (MN Series) or fast axis collimated unit (MY Series)
- Optional available also in AuSn technology
- Different heatsink geometries available



Device Specification

Optical Parameters ¹	Units						QCW	QCW
Center Wavelength Range ³	nm	808	808	915	940	980	808	808
Center Wavelength Tolerance	nm	±3	±3	±3	±3	±3	±3	±3
Output Power ²	W	40	50	40	40	40	100 ⁵	150 ⁵
Number of Emitters	#	19	19	19	19	19	75	75
Emitter Size	µm	150	100	150	150	150	110	110
Fill Factor	%	30	20	30	30	30	77	77
Spectral Width (FWHM)	nm	≤3	≤3	≤3	≤3	≤6	≤3	5
Slope Efficiency	W/A	>1.15	1.18	>1.15	>1.1	>1.05	>1.25	>1
Fast Axis Divergence ⁶ (90%)	degree	70	<62	70	70	65	70	70
Slow Axis Divergence (90%)	degree	8	<7	7	7	7	7	12
Wavelength Temp. Coefficient	nm/°C	~0.27	~0.27	~0.31	~0.31	~0.34	~0.27	~0.27
Electrical Parameters ¹								
Power Conversion Efficiency	%	>52	57	>58	>54	>50	>50	>50
Threshold Current (I _{TH})	A	<10	<8	<8.5	<8.5	<7	<15	<15
Operating Current (I _{OP})	A	45	52	45	45	43	<120	<120
Operating Voltage (V _{OP})	V	<1.8	<1.8	<1.7	<1.7	<1.7	<2	<2
Thermal Parameters								
Operating Temperature Range ^{3, 4}	°C					+20 to 30		
Storage Temperature Range ⁴	°C					0 to 55		
Recommended Heatsink Capacity Per Bar	W					≥70		

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

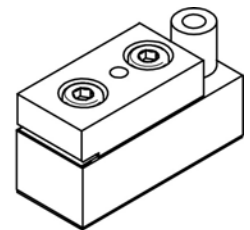
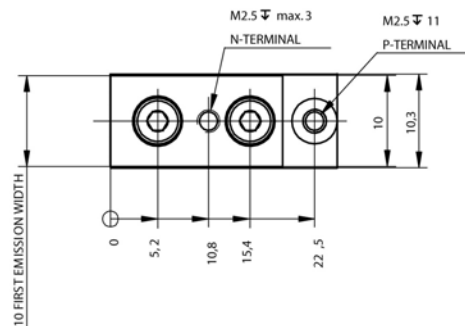
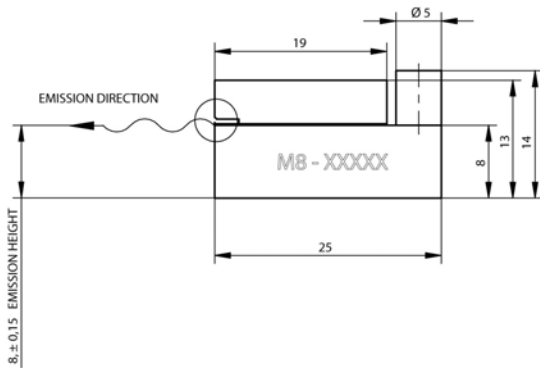
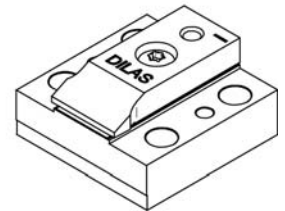
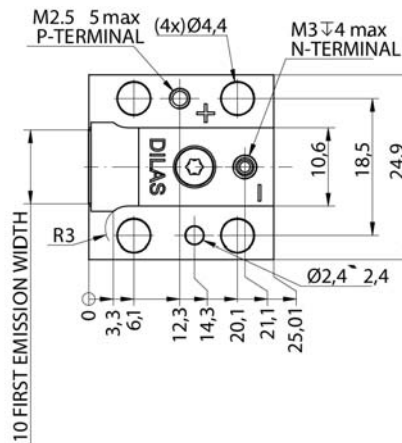
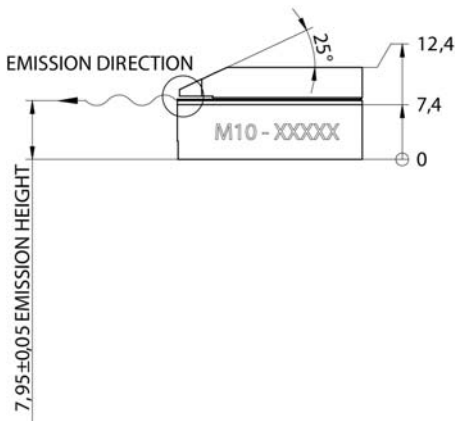
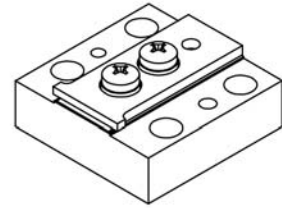
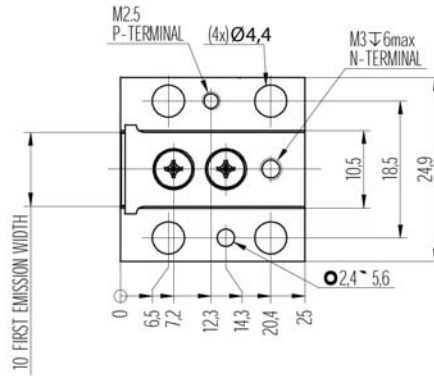
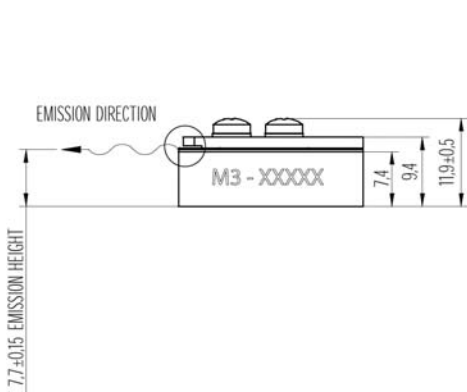
²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

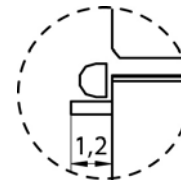
⁴A non-condensing environment is required for storage and operation below the ambient dew point.

⁵QCW, <2% duty cycle, <500µsec, upon availability, consult DILAS for details.

⁶For fast axis collimation using FAC lens: divergence <8mrad.



Volute for all heatsink MY-diode laser bars with fast axis collimation lens:



Other beam heights available:

- M1 mount = 8.7mm (upon request)
- M3 mount = 7.7mm
- M7 mount = 6.0mm (upon request)
- M8 mount = 8.0mm (upon request)
- M10 mount = 7.95mm



DILAS products specifications are subject to change 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.

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