

## 808nm, Conduction-Cooled Single Bars

### Features

- Very low smile
- Available with fast-axis collimation
- Different heatsink geometries available



### Device Specification

Optical Parameters <sup>1</sup>	Units	CW	CW	CW	QCW <sup>6</sup>	QCW <sup>6</sup>	QCW <sup>6</sup>
Center Wavelength Range <sup>3</sup>	nm	808	808	808	808	808	808
Center Wavelength Tolerance	nm	±3	±3	±3	±3	±3	±3
Output Power <sup>2</sup> (P <sub>OP</sub> )	W	40	50	60	150	200	280
Number of Emitters	#	19	19	19	47	62	40
Emitter Size	µm	150	100	150	100	100	200
Fill Factor	%	30	20	30	50	75	80
Spectral Width (FWHM)	nm	<3	<3	<3	<5	<5	<5
Slope Efficiency	W/A	>1.15	>1.16	>1.14	>1.20	>1.18	>1.25
Fast-Axis Divergence <sup>5</sup> (90%)	degree	<63	<63	<63	<65	<65	<65
Slow-Axis Divergence (90%)	degree	<10	<7.5	<8	<9	<12	<12
Wavelength Temp. Coefficient	nm/°C	~0.27	~0.27	~0.27	~0.27	~0.27	~0.27

Electrical Parameters <sup>1</sup>							
Power Conversion Efficiency	%	>52	>53	>53	>57	>53	>60
Threshold Current (I <sub>TH</sub> )	A	<8	<9	<12	<20	<28	<30
Operating Current (I <sub>OP</sub> )	A	<46	52	<67	<150	<190	<250
Operating Voltage (V <sub>OP</sub> )	V	<1.90	<1.80	<1.80	<1.90	<2.0	<2.00

Thermal Parameters <sup>1</sup>							
Operating Temperature Range <sup>4</sup>	°C	+20 to +30	+20 to +30	+20 to +30	+20 to +30	+20 to 30	+20 to +30
Storage Temperature Range <sup>4</sup>	°C	0 to +55	0 to +55	0 to +55	0 to +55	0 to 55	0 to +55
Recommended Heatsink Capacity Per Bar	W	>70	>70	>70	>20	>20	>20

<sup>1</sup>Data at 25°C cold plate temperature, unless otherwise stated.

<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<sup>3</sup>Others available upon request.

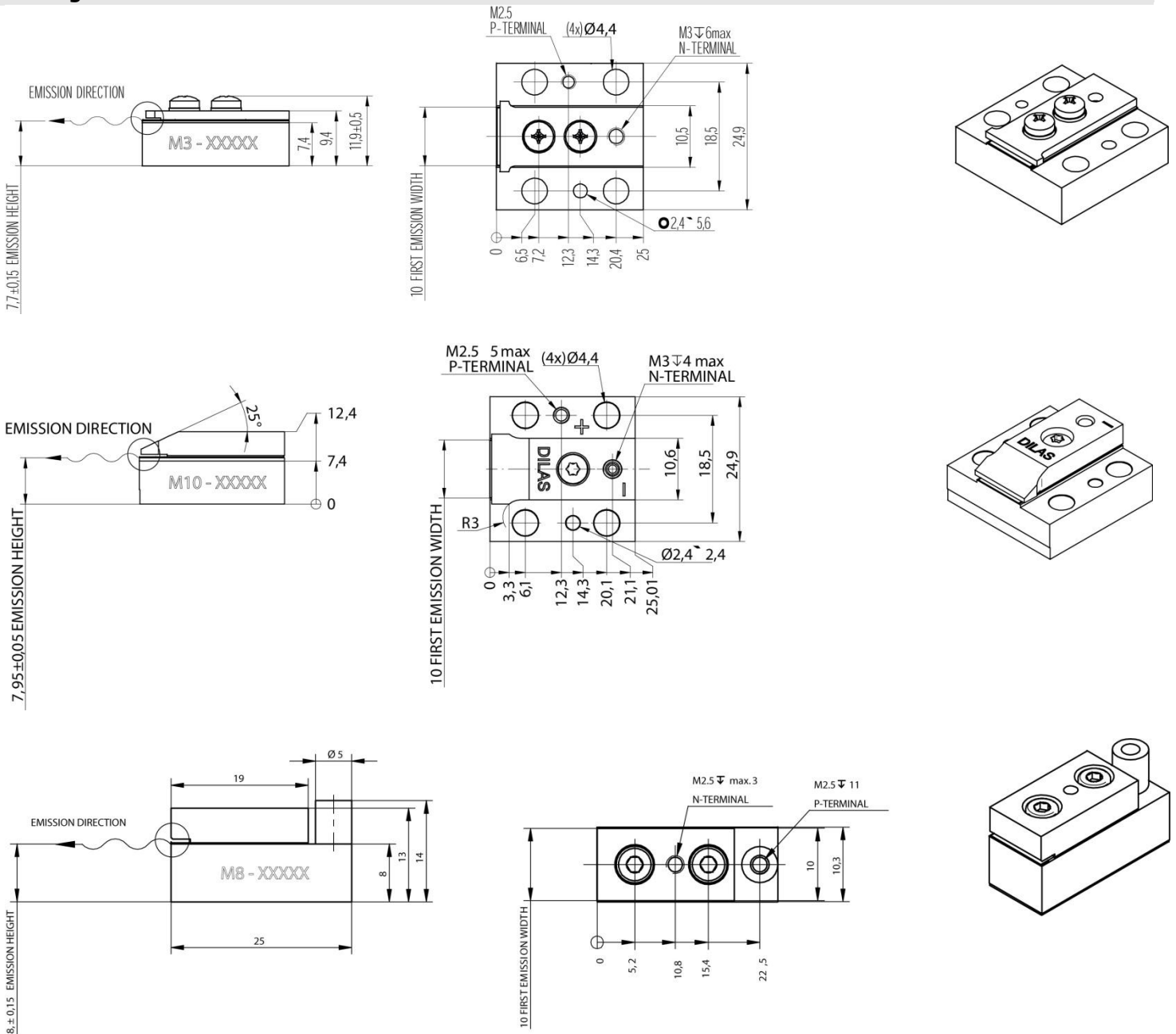
<sup>4</sup>A non-condensing environment is required for storage and operation below the ambient dew point.

<sup>5</sup>For fast-axis collimation using FAC lens: divergence <8mrad.

<sup>6</sup>Depending on pulse width and duty cycle.

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## Package Dimension



## Heatsink for MY Diode Laser Bars with Fast-Axis Collimation Lens:

Beam heights available:

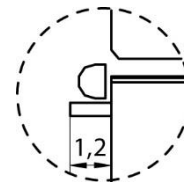
M3 mount = 7.7mm

M10 mount = 7.95mm

M8 mount = 8.0mm

Upon request:

M7 mount = 6.0mm



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