

## 79x, 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	79x	79x
Center Wavelength Range <sup>3</sup>	nm	79x	79x
Center Wavelength Tolerance	nm	±3	±3
Output Power <sup>2</sup> (P <sub>OP</sub> )	W	50	50
Number of Emitters	#	19	19
Emitter Size	µm	100	150
Fill Factor	%	20	30
Spectral Width (FWHM)	nm	<3.5	<3.5
Slope Efficiency	W/A	>1.10	>1.10
Fast-Axis Divergence <sup>5</sup> (90%)	degree	<63	<63
Slow-Axis Divergence (90%)	degree	<8	<8
Wavelength Temp. Coefficient	nm/°C	~0.27	~0.27

Electrical Parameters <sup>1</sup>			
Power Conversion Efficiency	%	>52	>50
Threshold Current (I <sub>TH</sub> )	A	<11	<13
Operating Current (I <sub>OP</sub> )	A	<60	<60
Operating Voltage (V <sub>OP</sub> )	V	<1.80	<1.80

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

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

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

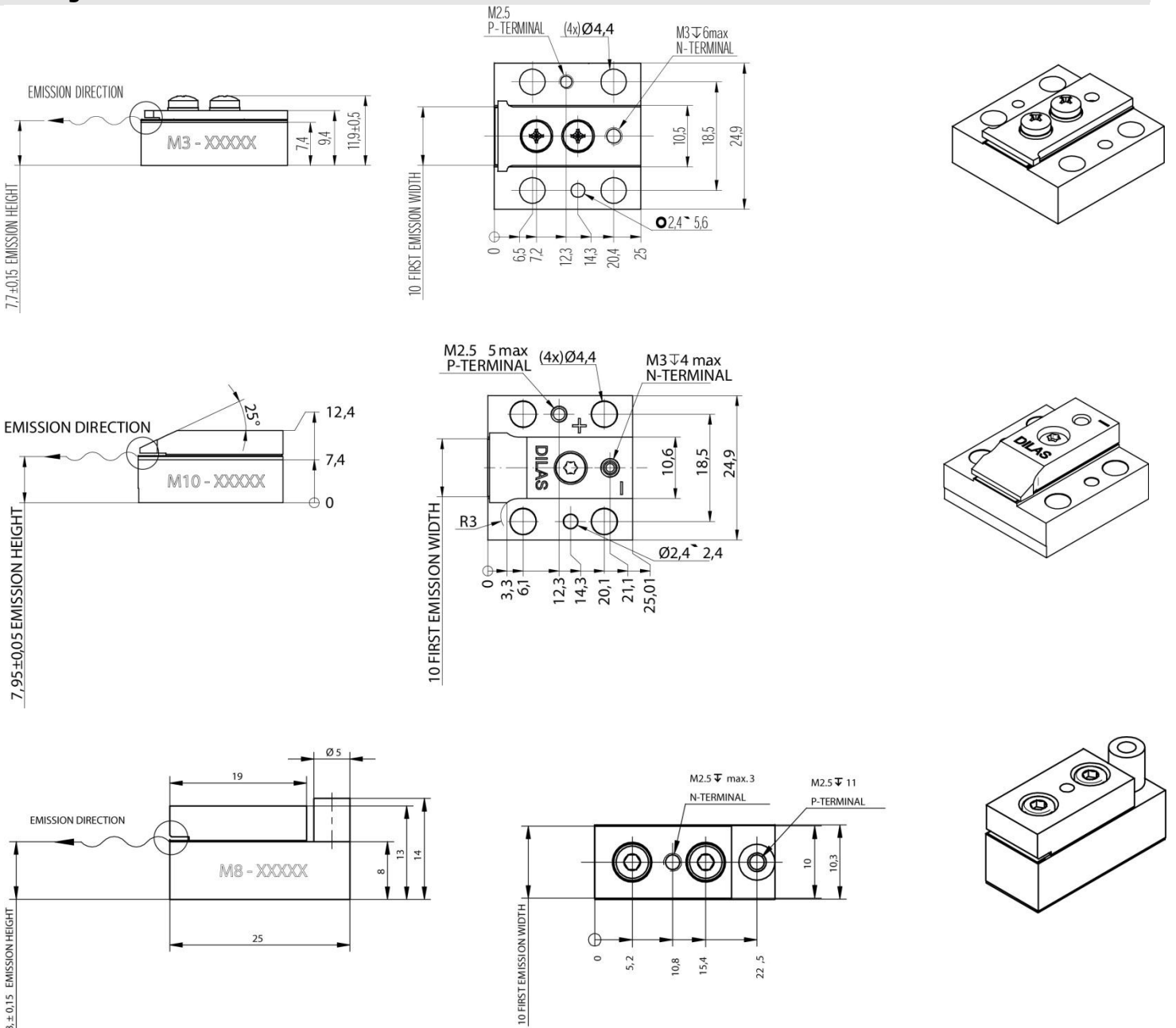
<sup>3</sup>Others available upon request.

<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.

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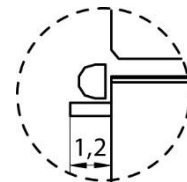
## Package Dimension



## 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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