

638nm, Conduction-Cooled Single Bars

Features

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



Device Specification

Optical Parameters ¹	Units	
Center Wavelength Range ³	nm	638 ⁶
Center Wavelength Tolerance	nm	±3
Output Power ² (P _{OP})	W	8
Number of Emitters	#	20
Emitter Size	µm	40
Fill Factor	%	20
Spectral Width (FWHM)	nm	<2.0
Slope Efficiency	W/A	>0.80
Fast-Axis Divergence ⁵ (90%)	degree	<90
Slow-Axis Divergence (90%)	degree	<10
Wavelength Temp. Coefficient	nm/°C	~0.16

Electrical Parameters ¹		
Power Conversion Efficiency	%	>25
Threshold Current (I _{TH})	A	<4.5
Operating Current (I _{OP})	A	<14
Operating Voltage (V _{OP})	V	<2.20

Thermal Parameters ¹		
Operating Temperature Range ⁴	°C	+20 to +25
Storage Temperature Range ⁴	°C	0 to +55
Recommended Heat Sink 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.

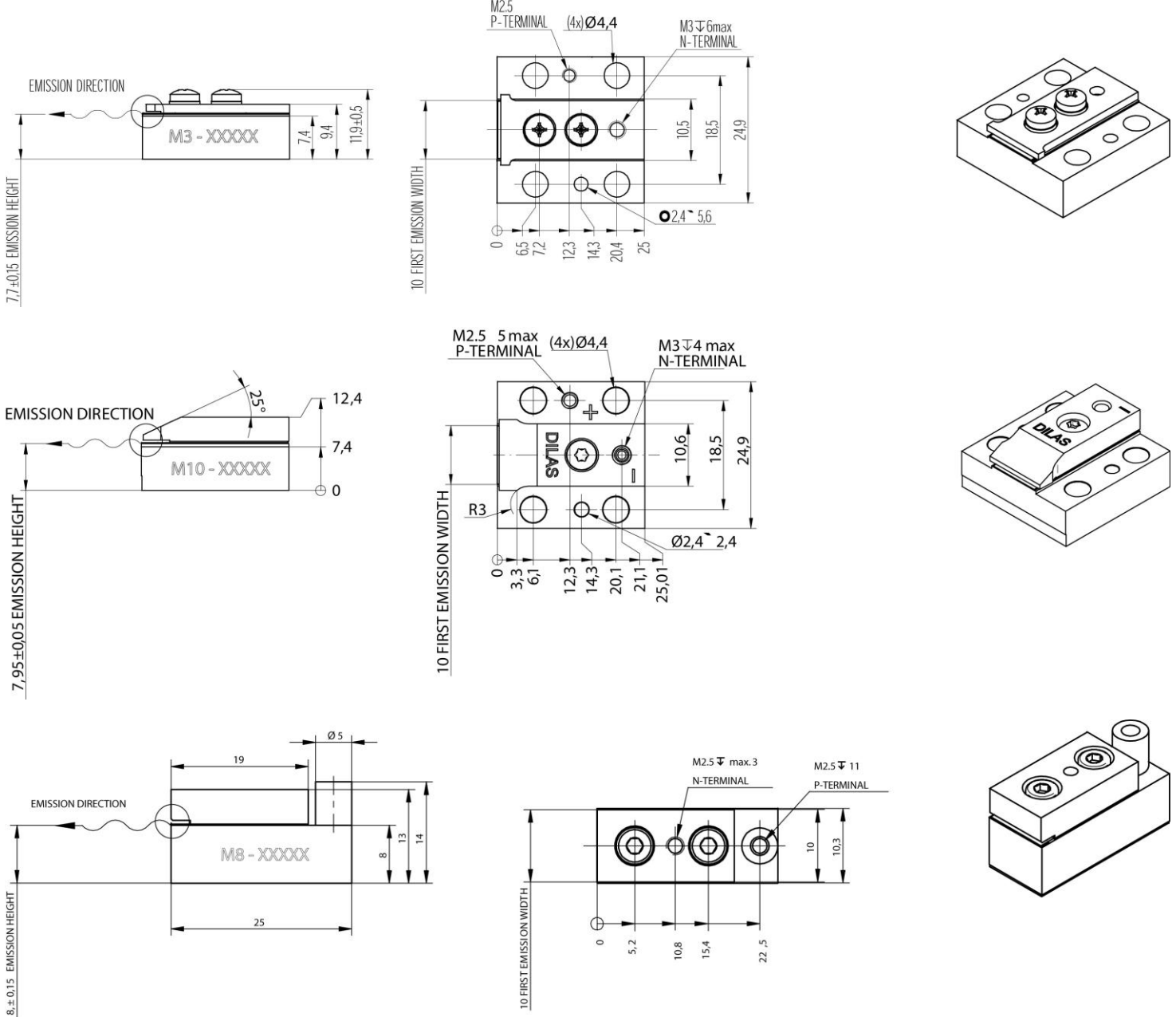
⁴A non-condensing environment is required for storage and operation below the ambient dew point.

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

⁶Only available at heatsink M10

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Package Dimension



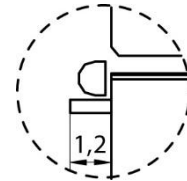
Heatsink for MY Diode Laser Bars with Fast-Axis Collimation Lens:

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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