

808nm, Water-Cooled, Horizontal Diode Laser Stack



Features

- Compact size
- Up to 13-bars side-by-side
- Low thermal resistance
- Flexible stack design
- Horizontal stacks designed to meet custom specifications
- Available in fast-axis and slow-axis collimated
- CW and QCW operation



Device Specification

Optical Parameters ¹	Units		
Center Wavelength Range ³	nm		808
Center Wavelength Tolerance ³	nm		±3
Output Power per Bar ^{2, 3, 4}	W	50	80
Number of Bars	#	(2 to 13), for Custom Configurations Consult DILAS	
Spectral Width (FWHM)	nm	<3	<3
Slope Efficiency per Bar	W/A	>1.12	>1.12
Fast-Axis Divergence ⁴ (90%)	mrad	<70	<70
Slow-Axis Divergence (90%)	mrad	<6.5	<6.5
Wavelength Temp. Coefficient	nm/°C	~0.27	~0.27

Electrical Parameters ¹			
Power Conversion Efficiency	%	>45	>48
Threshold Current (I_{TH})	A	<16	<16
Operating Current (I_{OP})	A	<65	<90
Operating Voltage per Bar (V_{OP})	V	<1.8	<1.8

Thermal Parameters		
Operating Temperature Range ³	°C	+20 to 30
Storage Temperature Range	°C	0 to 55

Please refer to DILAS water specification for cooling requirements.

¹Data at 25°C water temperature, unless otherwise stated.

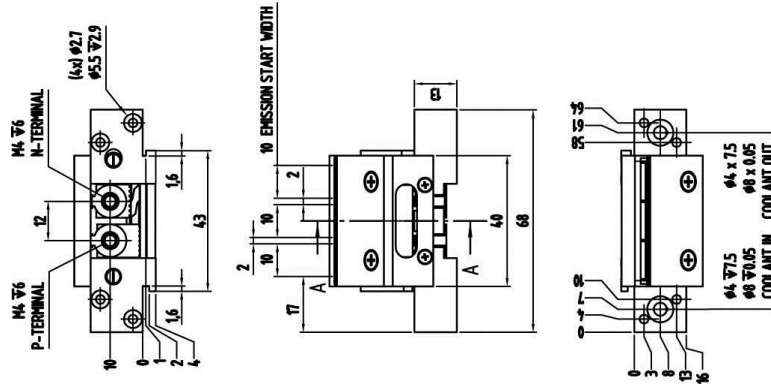
²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

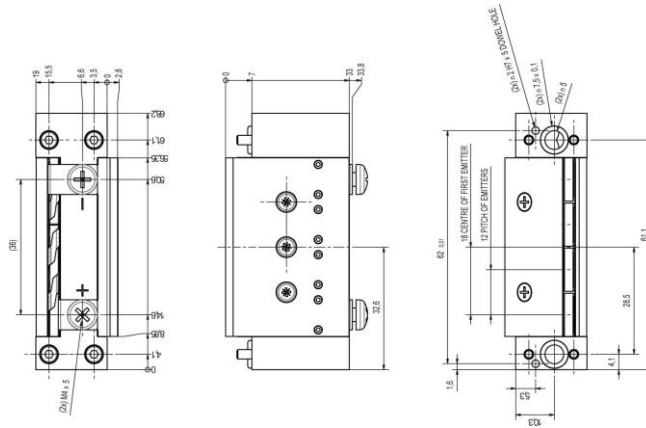
⁴For fast-axis collimation using FAC lens: divergence <8mrad.

Package Dimension

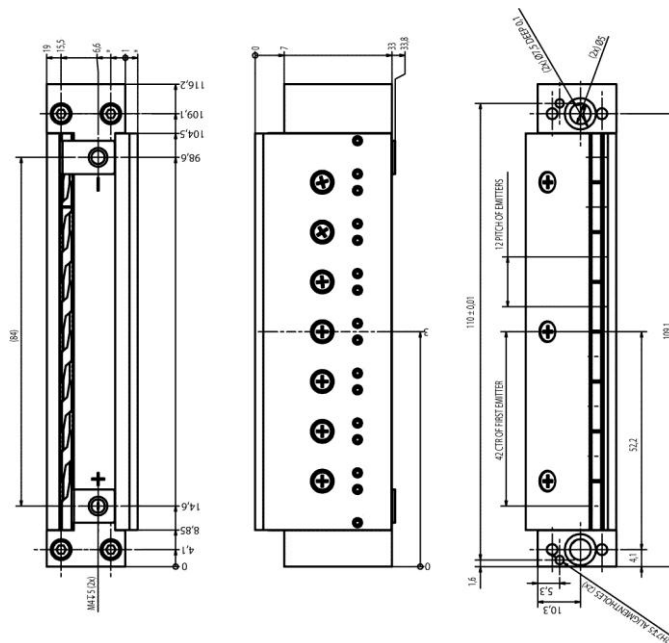
3-Bar Stack



4-Bar Stack



8-Bar Stack



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