

808nm, Water-Cooled, Single Bar Diode Laser

Features

- Single water-cooled bar
- Low thermal resistance CW and QCW operation
- Available as non-collimated or fast-axis-collimated unit
- Customized geometries available



Device Specification

Optical Parameters ¹	Units	CW		QCW	
Center Wavelength Range ³	nm	808			
Center Wavelength Tolerance ³	nm	±3			
	W				
Output Power per Bar ²		50	80	150 ⁴	250 ⁴
Number of Bars ³	#	1	1	1	1
Spectral Width (FWHM)	nm	<3	<3	<6	<6
Slope Efficiency per Bar	W/A	>1.14	>1.14	>1.2	>1.2
Fast-Axis Divergence (90%) ⁵	degrees	<70	<70	65	72
Slow-Axis Divergence (90%)	degrees	8	8	12	13
Wavelength Temp. Coefficient	nm/°C	~0.27			
Beam Geometry after FAC Lens (n=number of bars)		10mm x 0.8mm			

Electrical Parameters ¹					
Power Conversion Efficiency	%	>46	>48	>55	>58
Threshold Current (I _{TH})	A	<16	<17	<20	<30
Operating Current (I _{OP})	A	<60	<90	150	230
Operating Voltage (V _{OP})	V	<1.8	<1.8	<1.8	<1.9

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.

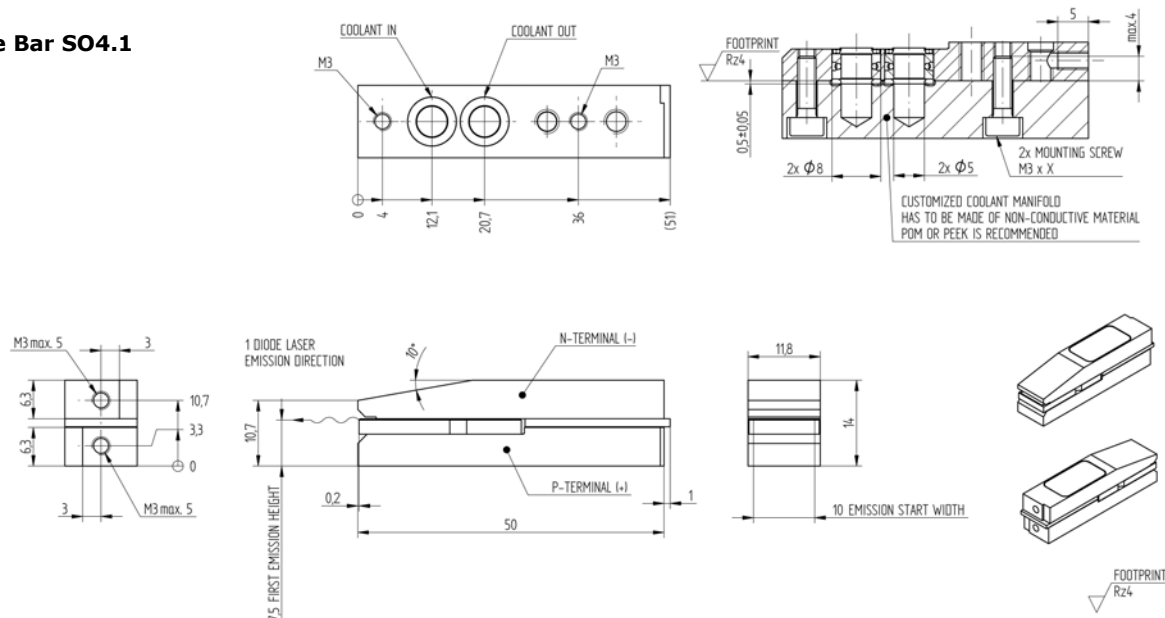
⁴QCW, <2% Duty Cycle, <500µsec.

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

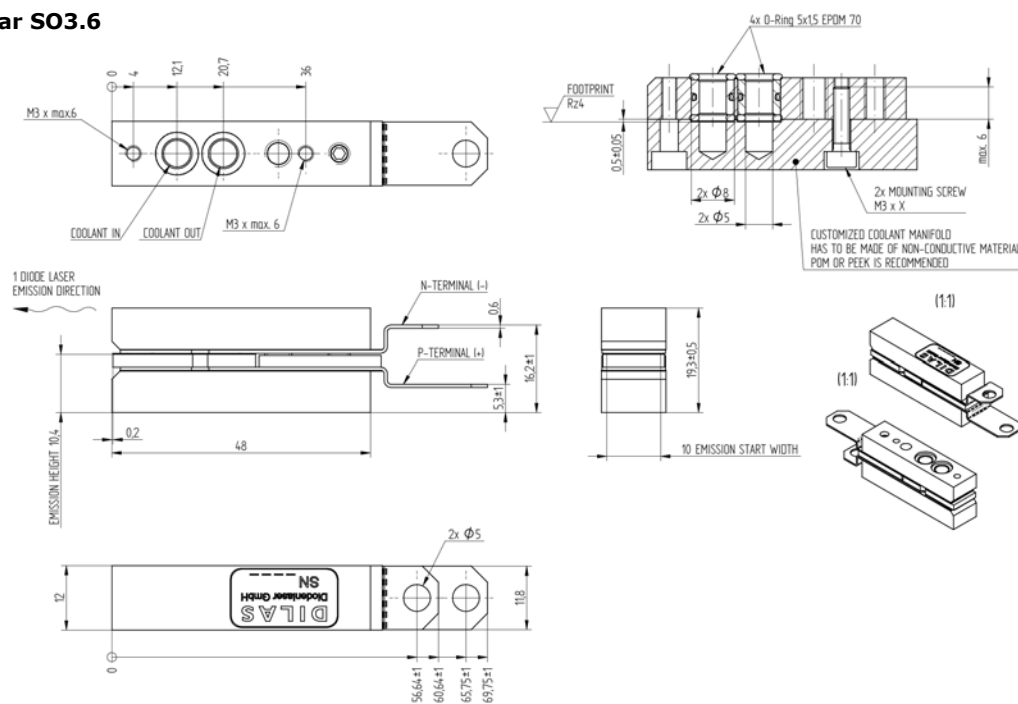
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Package Dimension

Single Bar S04.1



Single Bar S03.6



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