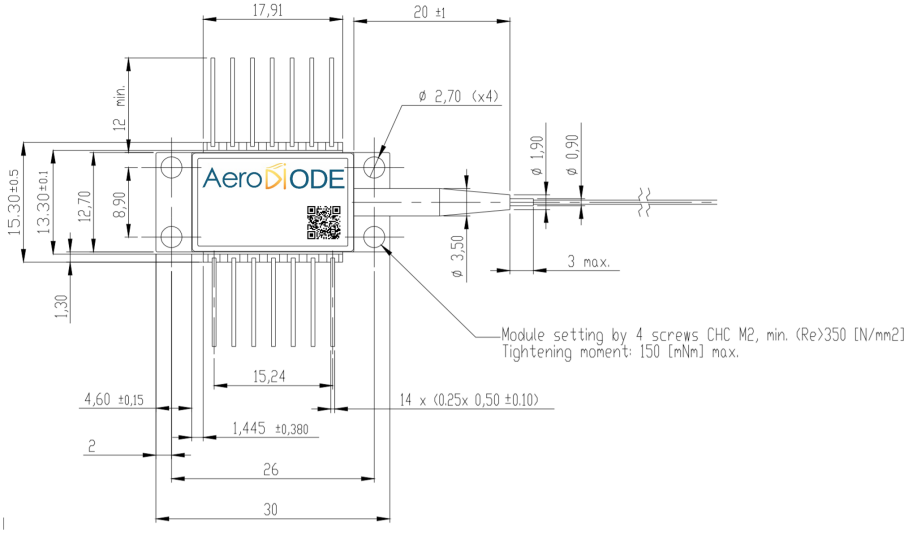
808 nm laser diode

250 mW / singlemode fiber / Butterfly package

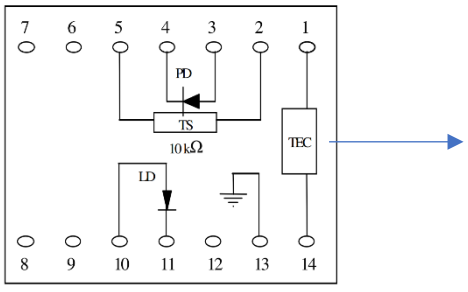
Reference: 808LD-1-0-0

SPECIFICATIONS	Unit	Min	Typ	Maximum
Optical parameters				
Output Power	mW		250	
Center Wavelength (optional "FBG" version)	nm	803 (807)	808 (808)	813 (809)
Spectral Width (FWHM) / (optional "FBG" version)	nm		1.0 (0.1)	
Threshold Current	mA		90	120
Operating Current	mA		390	450
Operating Voltage	V		2.0	2.3
Wavelength shift w Temperature (Optional "FBG" version)	nm/°C		0.25 ($5\ 10^{-3}$)	
Wavelength shift w Current (Optional "FBG" version)	nm/A		5 (~0)	
Side mode suppression ratio (Optional FBG version)	dB		(20)	
Internal photodiode responsivity	mA/W	1	5	20
Internal photodiode dark current	nA		5	40
TEC current (25°/case@70°)	A		1.1	
TEC voltage (25°/case@70°)	V		1.9	
Internal thermistor (25°)	kOhm	9.5	10	10.5
Fiber type	Hi780			
Fiber bend radius	mm	25		
Storage temperature	°C	-40		85
Operating case temperature	°C	-20		70
Operating chip temperature	°C	20		40
Laser diode reverse voltage	V			2

Form factor:



Laser diode pinning:



Totally floating pin-out

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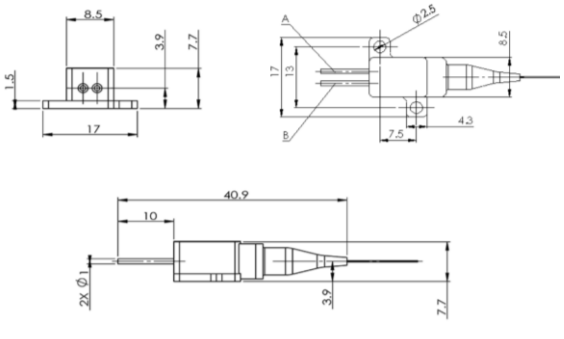
808 nm laser diode

10 W / 105 µm fiber

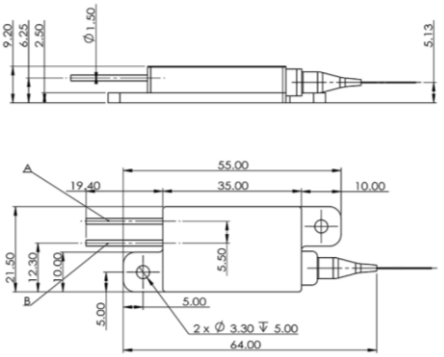
Reference: 808LD-2-0-0 Technology : Single-element multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Optical parameters				
Output Power	W	10		
Center Wavelength	nm	805	808	811
Spectral Width (FWHM)	nm		3.5	
Threshold Current	A		0.2	0.5
Operating Current	A		3.5	4.0
Operation Voltage	V		5.5	
Conversion Efficiency	%		45	
95% power with NA	NA		0.17	
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift with current	nm/A		0.6	
Slope Efficiency	W/A		2.7	
Storage Temperature	°C	-30		70
Case Operating Temperature	°C	15	25	55
Minimum Fiber Bend Radius	mm		37.5	
Fiber Buffer/tube Diameter	µm		250	
Fiber Clad Diameter	µm		125	
Fiber Core Diameter	µm		105	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Fiber connector	Yes (SMA)			
ROHS Compliant	Yes			
Please solder the pins when the level of current is over 6A				

Form factor:



Small form factor coupled in a 200 µm fiber (specifications may vary for this model)



Large form factor coupled in a 105 µm fiber

Revision 04/21 – April 2020

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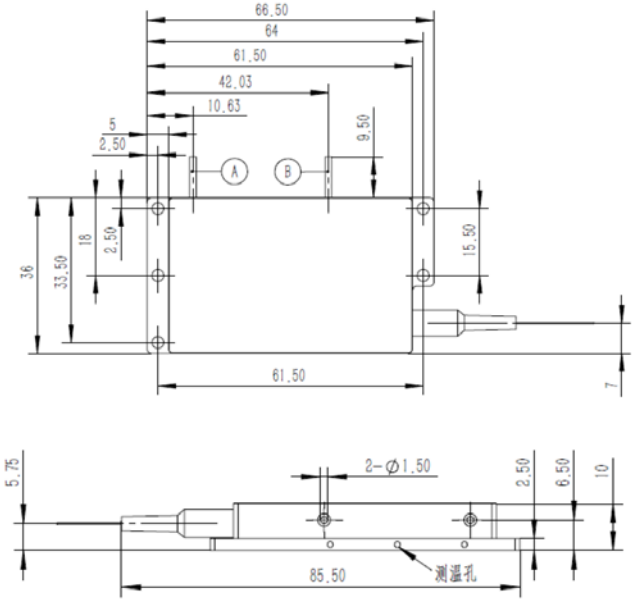
808 nm laser diode

35 W / 105 µm fiber

Reference: 808LD-3-0-0

SPECIFICATIONS	Unit	Min	Typ	Maximum
Optical parameters				
Output Power	W	35		
Center Wavelength	nm	803	808	813
Spectral Width (FWHM)	nm		3.5	
Threshold Current	A		0.6	0.8
Operating Current	A		6.5	7.0
Operation Voltage	V		13.5	
Conversion Efficiency	%		40	
95% power with NA	NA		0.18	
Wavelength shift w Temperature	nm/°C		0.3	
Slope Efficiency	W/A		6.5	
Storage Temperature	°C	-30		70
Case Operating Temperature	°C	15	25	35
Minimum Fiber Bend Radius	mm		37.5	
Fiber Buffer/tube Diameter	µm		250/900	
Fiber Clad Diameter	µm		125	
Fiber Core Diameter	µm		105	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Fiber connector	Yes (SMA)			
ROHS Compliant	Yes			
Please solder the pins when the level of current is over 6A				

Form factor:



Revision 1.0 – Nov 2020

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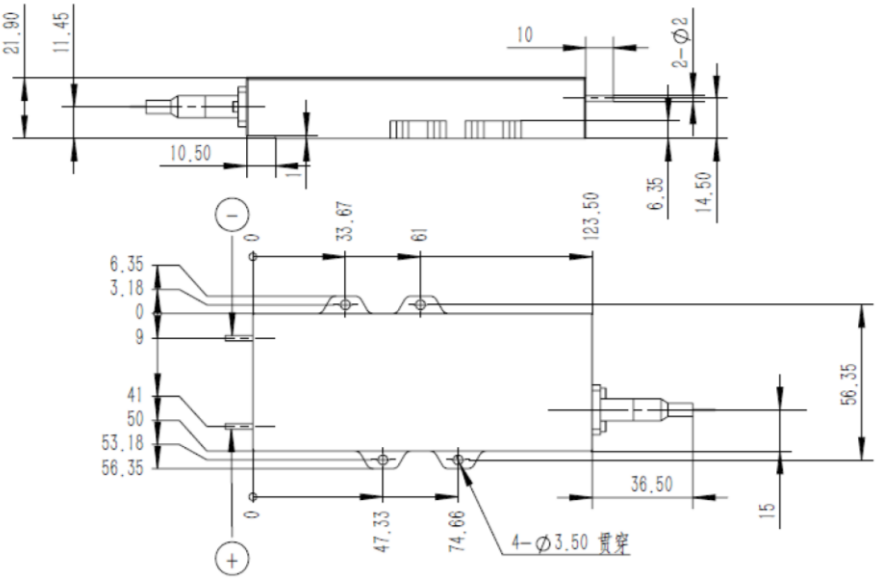
808 nm laser diode

60 W / 105 µm fiber

Reference: 808LD-4-0-0 Technology : Multiple-emitters Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Optical parameters				
Output Power	W	60		
Center Wavelength	nm	803	808	813
Spectral Width (FWHM)	nm		4.0	
Threshold Current	A		0.7	0.9
Operating Current	A		7.0	8.0
Operation Voltage	V		22.5	
Conversion Efficiency	%		40	
95% power with NA	NA		0.18	
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift with current	nm/A		0.6	
Slope Efficiency	W/A		10	
Storage Temperature	°C	-30		70
Case Operating Temperature	°C	15	25	55
Minimum Fiber Bend Radius	mm	37.5		
Fiber Buffer/tube Diameter	µm		250/900	
Fiber Clad Diameter	µm		125	
Fiber Core Diameter	µm		105	
Numerical Aperture	NA		0.22	
Fiber length	M		1.5	
Soldering Temperature	°C			260
Soldering time	s			10
Fiber connector	OPTION (SMA)			
ROHS Compliant	Yes			
Please solder the pins when the level of current is over 6A				

Form factor:



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808 nm laser diode

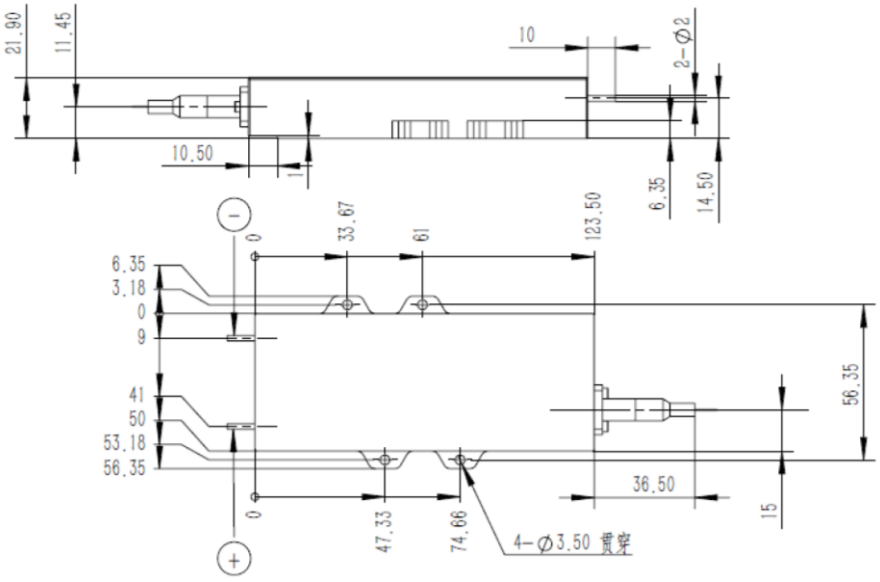
100 W / 200 µm fiber*

Reference: 808LD-5-0-0 Technology : Multiple emitters Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Optical parameters				
Output Power	W	100		
Center Wavelength	nm	805	808	811
Spectral Width (FWHM)	nm		4.0	7.0
Threshold Current	A		1.0	1.5
Operating Current	A		9.5	10.0
Operation Voltage	V		27.0	
Conversion Efficiency	%		40	
95% power with NA	NA		0.18	
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift with current	nm/A		0.6	
Slope Efficiency	W/A		13	
Storage Temperature	°C	-30		70
Case Operating Temperature	°C	15	25	55
Minimum Fiber Bend Radius	mm	75		
Fiber Buffer/tube Diameter	µm		320/900	
Fiber Clad Diameter	µm		220*	
Fiber Core Diameter	µm		200*	
Numerical Aperture	NA		0.22	
Fiber length	M		1.5	
Soldering Temperature	°C			260
Soldering time	s			10
Fiber connector	Option (SMA)			
ROHS Compliant	Yes			
Please solder the pins when the level of current is over 6A				

**Possibility for a 105/125µm fiber up to 85W – Contact us as the LIV characteristics above are different*

Form factor:



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