

980 nm laser diode

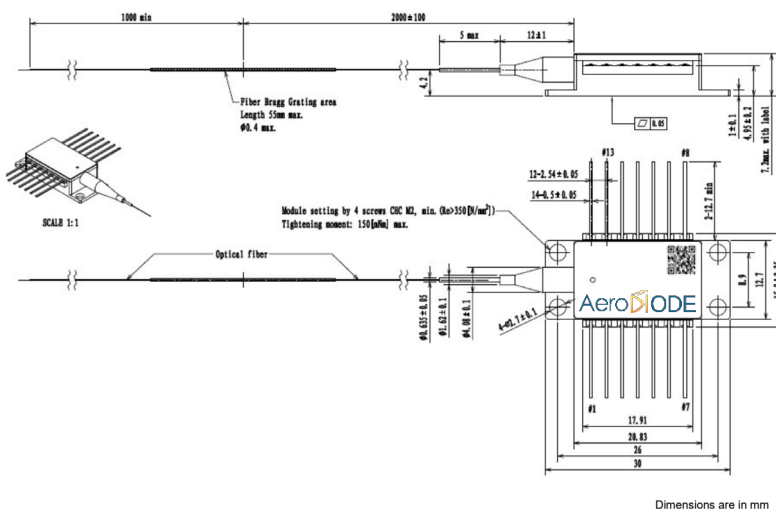
750 mW / singlemode fiber / Butterfly package

Reference: 980LD-2-0-0

Technology : Single mode FP with Bragg Grating

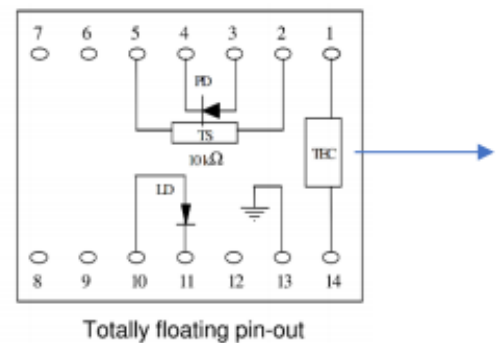
SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	mW	750		
Center Wavelength	nm	980	981	982
Spectral Width (FWHM)	nm			1.0
Threshold Current	mA			100
Operating Current	mA		1360	
Operation Voltage	V			2.0
Wavelength shift w Temperature	nm/°C			0.02
Power in Band	%	90		
Polarization Extinction Ratio	dB	13		
Internal Photodiode Responsivity	mA/W	0.5		10
Internal Photodiode Dark Current	nA			100
TEC current (Case @ 75°C)	A			1.6
TEC Voltage (Case at 75°C)	V			3.4
Internal thermistor (25°C)	kOhm	9.5		10.5
Fiber type	SM98-PS-U25D-H or equivalent			
Fiber bend radius	mm	16 (abs min)		
Coating diameter	µm	230	250	270
Fiber connector	Yes (FC/APC)			
Storage case temperature	°C	-40 (abs min)		85 (abs max)
Operating case temperature	°C	-20 (abs min)		75 (abs max)
Lead soldering temperature	°C			280
Laser diode reverse voltage	V			2.0
Polarization state	Aligned to the slow axis			

Form factor:



Dimensions are in mm

Laser diode pinning :



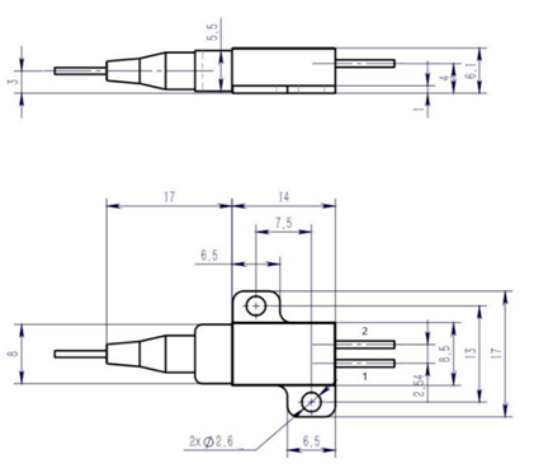
980 nm laser diode 10 W- 105 μm fiber – 0.15 NA

Reference: 980LD-3-0-0

Technology : Single emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	10		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		3.5	7
Threshold Current	A		0.55	0.9
Operating Current	A		11.7	12.5
Operation Voltage	V		1.75	2.2
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Feedback isolation	nm	1020		1200
	Isolation	30		
Slope Efficiency	W/A		0.9	
Fiber Buffer/tube Diameter	μm		250	
Fiber Clad Diameter	μm		125	
Fiber Core Diameter	μm		105	
Numerical Aperture	NA		0.15	
Storage case temperature	°C	-30		70
Operating case temperature	°C	15		55
Soldering Temperature	°C			260
Soldering time	s			10
Fiber connector	Yes (SMA905)			
Fiber bend radius	mm	37.5		
Please solder the pins when the level of current is over 6A				

Form factor:



980 nm laser diode 30 W- 105 μ m fiber – 0.22 NA

Reference: 980LD-4-0-0

Technology : Multi-emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	30		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		6	
Threshold Current	A		0.9	
Operating Current	A		12	13
Operation Voltage	V		4.8	6.0
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Slope Efficiency	W/A		2.7	
Feedback isolation	nm	1020		1200
	Isolation	30		
Storage case temperature	°C	-20 (abs min)		70 (abs max)
Operating case temperature	°C	15 (abs min)		35 (abs max)
Fiber bend radius	mm	50 (abs min)		
Fiber Buffer/tube Diameter	μ m		245/900	
Fiber Clad Diameter	μ m		125	
Fiber Core Diameter	μ m		105	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Dimensions	mm	43*25*11		
Mounting holes Diam./Dist.	mm	Ø3.2 20*38		
Fiber connector	Yes (SMA905)			
Fiber bend radius	mm	50		

Please solder the pins when the level of current is over 6A



980 nm laser diode

70 W – 105 μ m fiber – 0.22 NA

Reference: 980LD-5-0-0

Technology : Multi-emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	70		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		6	
Threshold Current	A		0.9	
Operating Current	A		12	13
Operation Voltage	V		11	12.5
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Slope Efficiency	W/A		6.5	
Feedback isolation	nm	1020		1200
	dB	30		
Storage case temperature	°C	-20 (abs min)		70 (abs max)
Operating case temperature	°C	15 (abs min)		35 (abs max)
Fiber bend radius	mm	50 (abs min)		
Fiber Buffer/tube Diameter	μ m		245/900	
Fiber Clad Diameter	μ m		125	
Fiber Core Diameter	μ m		105	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Dimensions	mm	80*48*16		
Mounting holes diam./dist.	mm	Ø3.4 / 75*40		
Fiber connector		Yes (SMA905)		
Fiber bend radius	mm	37.5		

Please solder the pins when the level of current is over 6A



980 nm laser diode

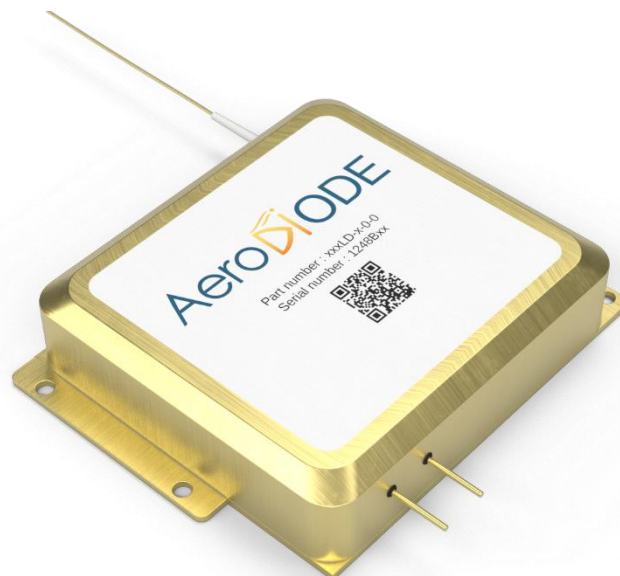
150 W – 105 μm fiber – 0.22 NA

Reference: 980LD-6-0-0

Technology : Multi-emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	150		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		6	
Threshold Current	A		0.9	
Operating Current	A		13.2	14.0
Operation Voltage	V		22.4	23.8
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Slope Efficiency	W/A		13.0	
Feedback isolation	nm	1020		1200
	dB	30		
Storage case temperature	°C	-20 (abs min)		70 (abs max)
Operating case temperature	°C	15 (abs min)		35 (abs max)
Fiber bend radius	mm	50 (abs min)		
Fiber Buffer/tube Diameter	μm		245/900	
Fiber Clad Diameter	μm		125	
Fiber Core Diameter	μm		105	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Dimensions	mm	80*80*25		
Mounting holes diam/dist	mm	Ø3.3 / 74.4*38		
Fiber connector		Yes (SMA905)		
Fiber bend radius	mm	50		

Please solder the pins when the level of current is over 6A



980 nm laser diode

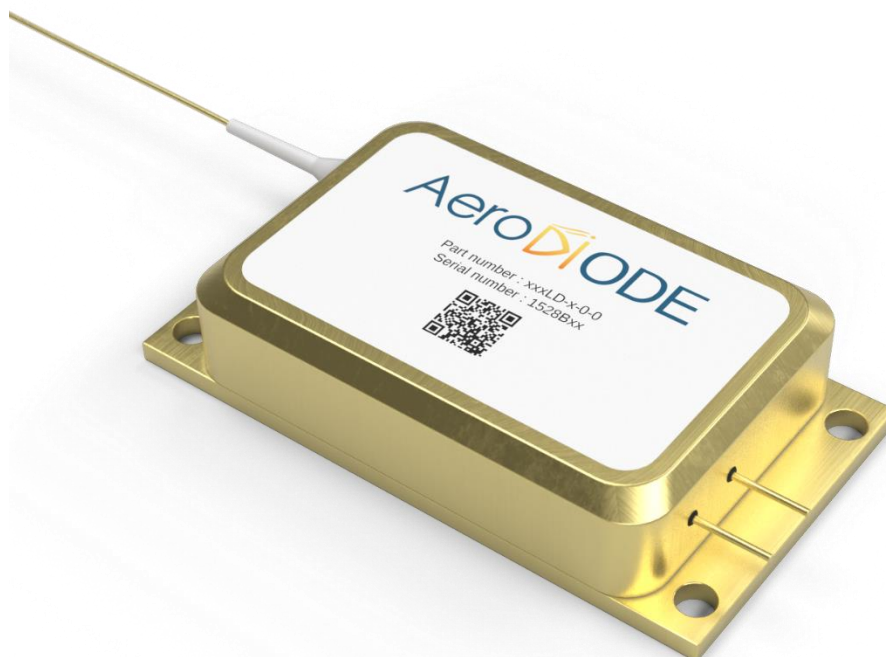
250 W – 135 μm fiber – 0.22 NA

Reference: 980LD-7-0-0

Technology : Multi-emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	250		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		4	
Threshold Current	A		0.9	
Operating Current	A		18.5	20.0
Operation Voltage	V		27.2	30.0
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Slope Efficiency	W/A		14	
Feedback isolation	nm	1020		1200
	dB	30		
Storage case temperature	°C	-20 (abs min)		70 (abs max)
Operating case temperature	°C	15 (abs min)		35 (abs max)
Fiber bend radius	mm	50 (abs min)		
Fiber Buffer/tube Diameter	μm		245/900	
Fiber Clad Diameter	μm		155	
Fiber Core Diameter	μm		135	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Dimensions	mm	141*55*18		
Mounting holes (diam./dist.)	mm	Ø3.4 / 130*55		
Fiber connector	Yes (HP-SMA905)			
Fiber bend radius	mm	50		

Please solder the pins when the level of current is over 6A



980 nm laser diode

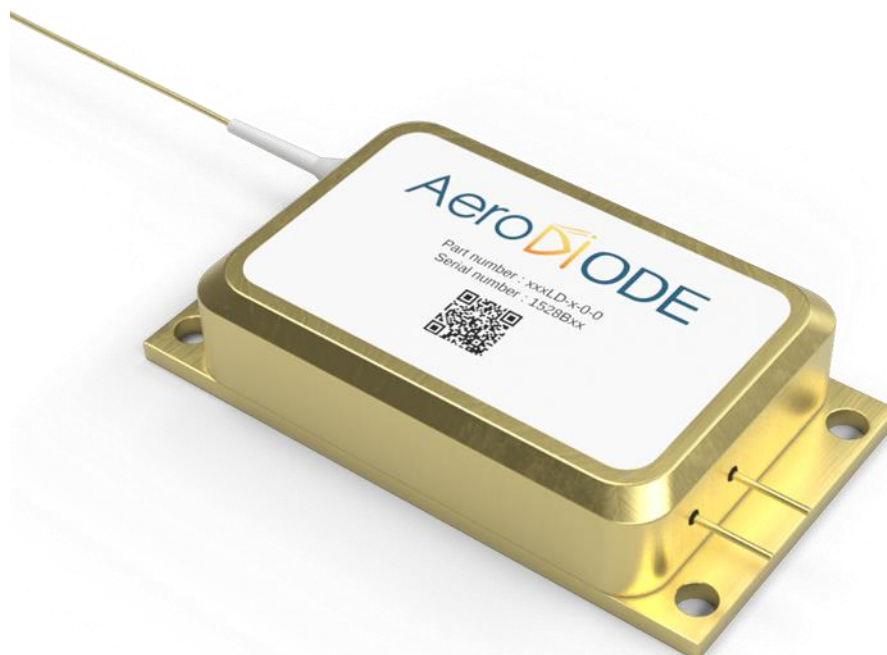
330 W – 200 μm fiber – 0.22 NA

Reference: 980LD-8-0-0

Technology : Multi-emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	330		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		4	
Threshold Current	A		1.0	
Operating Current	A		21.0	22.0
Operation Voltage	V		33.0	34.0
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Slope Efficiency	W/A		17	
Feedback isolation	nm	1020		1200
	dB	30		
Storage case temperature	°C	-20 (abs min)		70 (abs max)
Operating case temperature	°C	15 (abs min)		35 (abs max)
Fiber bend radius	mm	50 (abs min)		
Fiber Buffer/tube Diameter	μm		245/900	
Fiber Clad Diameter	μm		220	
Fiber Core Diameter	μm		200	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Dimensions	mm	141*55*18		
Mounting holes (diam./dist.)	mm	Ø3.4 / 130*55		
Fiber connector	Yes (HP-SMA905)			
Fiber bend radius	mm	50		

Please solder the pins when the level of current is over 6A



980 nm laser diode

450 W – 220 μm fiber – 0.22 NA

Reference: 980LD-9-0-0

Technology : Multi-emitter Multimode

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power	W	450		
Center Wavelength	nm	973	976	979
Spectral Width (FWHM)	nm		4	
Threshold Current	A		1.0	
Operating Current	A		32.0	33.0
Operation Voltage	V		29.0	31.0
Wavelength shift w Temperature	nm/°C		0.3	
Wavelength shift w current	nm/A		1.0	
Slope Efficiency	W/A		14.3	
Feedback isolation	nm	1020		1200
	dB	30		
Storage case temperature	°C	-20 (abs min)		70 (abs max)
Operating case temperature	°C	15 (abs min)		35 (abs max)
Fiber bend radius	mm	50 (abs min)		
Fiber Buffer/tube Diameter	μm		245/900	
Fiber Clad Diameter	μm		242	
Fiber Core Diameter	μm		220	
Numerical Aperture	NA		0.22	
Soldering Temperature	°C			260
Soldering time	s			10
Dimensions	mm	141*55*18		
Mounting holes (diam./dist.)	mm	Ø3.4 / 130*45		
Fiber connector	Yes (HP-SMA905)			
Fiber bend radius	mm	50		

Please solder the pins when the level of current is over 6A

