

1090 nm laser diode

Model 1: 400mW* / singlemode fiber / 14 pin Butterfly / SMF or PMF

Reference: 1090LD-1-0-0 (-1: SMF; -2: PMF)

Technology: Fabry-Pérot**

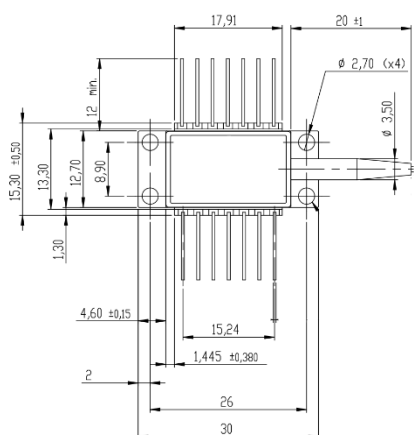
SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	400		
Center Wavelength***	nm	1084	1090	1091
Spectral Width (FWHM) (if FBG OPTION)	nm		0.2 (0.08)	4 (0.1)
Threshold Current	mA		50	100
Operating Current	mA		800	900
Operating Voltage	V		1.8	2.0
Wavelength shift w Temperature (with FBG OPTION)	nm/°C		0.35 (-0)	
Polarization Extinction Ratio (with PM option)	dB	15	17	
TEC Current	A			3
TEC Voltage	V			4
Internal thermistor (25°C)	kΩ	9.9	10	10.1
Storage temperature	°C	-40		85
Operating temperature	°C	0		70
Pin soldering temperature (max 10 sec)	°C			300
Laser diode reverse voltage	V			2
Butterfly pin configuration	Type-1			
Fiber type (with PM option)	H11060 (PM980)			
Pigtail termination	FC/APC			
Polarization state (PM version)	Aligned to the slow axis			

*: Special model with more power available (up to 700 mW)

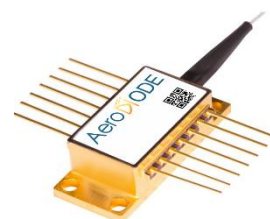
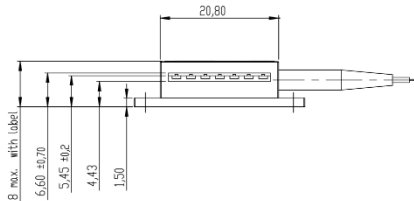
** : See our tutorial: [fiber coupled laser diode](#) – Fabry-Perot laser diodes have a spectrum with multiple peaks – for narrow and stable emission select the FBG option, for single frequency operation, choose the other (DFB) Model.

***: Possibility to target a special wavelength

Form factor & laser diode pin configuration (standard 14-pin Butterfly Type-1) :



Dimensions are in mm.



PIN	FUNCTION	PIN	FUNCTION
1	TEC (+)	8	NC
2	Thermistor	9	NC
3	Monitor PD Anode	10	LD Anode (+)
4	Monitor PD Cathode	11	LD Cathode (-)
5	Thermistor	12	NC
6	NC	13	Ground
7	NC	14	TEC (-)