

1045 nm laser diode

Model 2: 70mW / singlemode fiber / 14 pin Butterfly / SMF or PMF
with mode-hop free continuous tuning

Reference: 1045LD-2-0-0 (-1: SMF; -2: PMF)

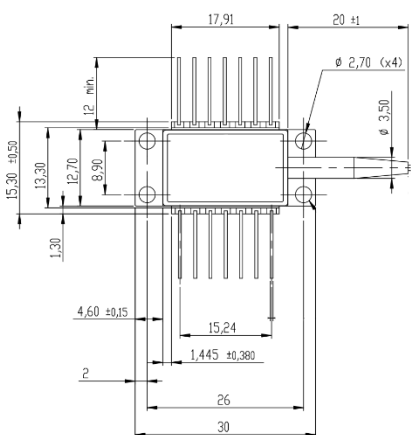
Technology: DFB*

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	50	70	
Center Wavelength**	nm	1044	1045	1046
Threshold Current	mA		30	80
Operating Current (CW mode)	mA		220	280
Operating Voltage	V		1.7	2.5
Wavelength shift w Temperature	nm/°C		0.10	
Wavelength shift w Current	nm/mA		0.0015	
Internal Photodiode Responsivity	mA/W		0.3	
Internal Photodiode Current	μA		25	
Side-Mode Suppression Ratio	dB	40	55	
Polarization Extinction Ratio	dB	15	18	
TEC Current	A			3.0
TEC Voltage	V			4.0
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 (PM version)	HI1060 (PM980)			
Pigtail termination	FC/APC			
Polarization state (PM version)	Aligned to the slow axis			

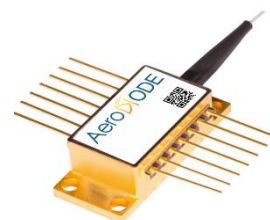
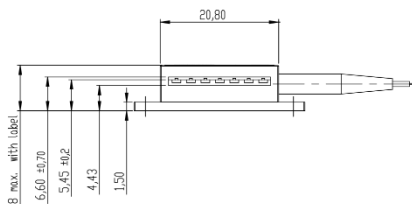
*: See our tutorial: [fiber coupled laser diode](#)

** : 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 (-)