

520nm laser diode

Model 2: 50mW / singlemode fiber / 14 pin Butterfly / SMF or PMF

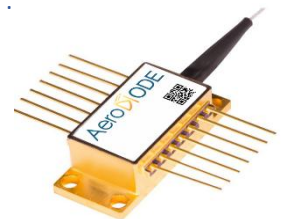
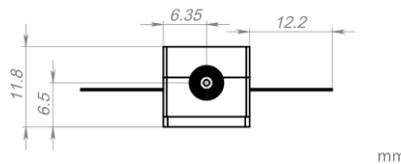
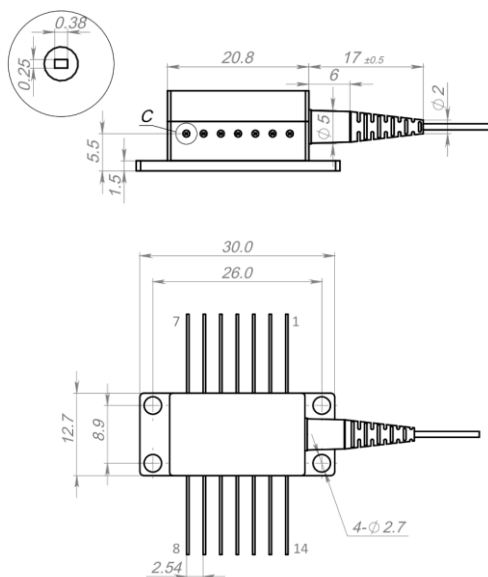
Reference: 520LD-2-0-0 (-1: SMF; -2: PMF)

Technology: Fabry-Pérot*

SPECIFICATIONS	Unit	Min	Typ	Max
Optical Power (Option 1: PM)	mW	50 (30)	55 (35)	
Center Wavelength	nm	515	520	530
Spectral Width (FWHM)	nm		1	3
Threshold Current	mA		70	100
Operating Current (25°C)	mA		240	250
Operating Voltage	V		6.5	7.5
TEC current	A			1.4
TEC voltage	V			3.9
Wavelength shift w Temperature	nm/°C		0.03	
Internal thermistor (25°) $R_t=10 \cdot \text{EXP} (3600 \cdot \{1/T(K)-1/298\})$ kΩ	kΩ		10	
Polarization extinction ratio if Option 1: PM	dB	17		
Fiber type (Option PM)	460-HP (PM460-HP)			
Fiber bend radius (long term)	mm	13		
Storage temperature	°C	-40		+60
Operating case temperature	°C	-20		+60
Lead soldering temperature	°C			260
Laser diode reverse voltage	V		2	
Butterfly pin configuration	Type-1			
Pigtail termination	FC/APC			
Polarization state (PM version)	Aligned to the slow axis			

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

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



PIN	FUNCTION	PIN	FUNCTION
1	TEC(+)	14	TEC(-)
2	THERMISTOR	13	CASE
3	NC	12	NC
4	NC	11	LD(-)
5	THERMISTOR	10	LD(+)
6	NC	9	NC
7	NC	8	NC

Emission spectrum & LIV

