

450 nm laser diode

Model 1: 50 mW / singlemode fiber / 14 pin Butterfly / SMF or PMF

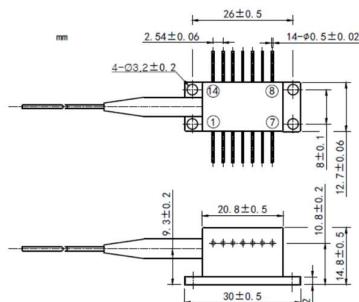
Reference: 450LD-1-0-0 (-1: SMF ; -2: PMF)

Technology : Fabry-Pérot*

SPECIFICATIONS	Unit	Min	Typ	Maximum
Output Power (CW mode)	mW	50		
Output Power (Pulse mode)	mW		60	
Center Wavelength (CW)	nm	440	450	460
Threshold Current	mA		25	60
Operating Current	mA		140	160
Operating Voltage	V		6.0	7.0
Wavelength shift w Temperature	nm/°C		0.15	
TEC Current	A			1.3
TEC Voltage	V			4.0
Internal thermistor (25°C)	kΩ		10	
Fiber Core / NA		3μm / 0.12		
Storage case temperature	°C	-20 (abs min)		80 (abs max)
Case operating temperature	°C	10		30
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

