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An OSI Systems Company

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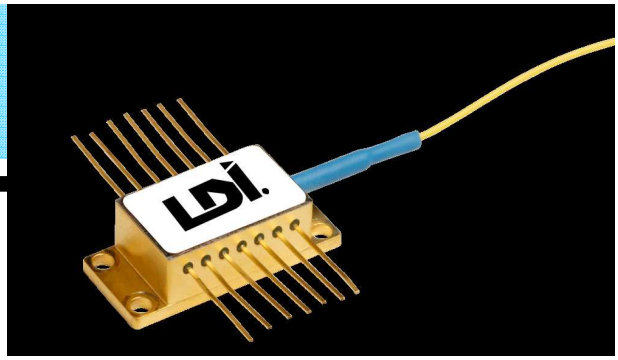
CW 635-BF

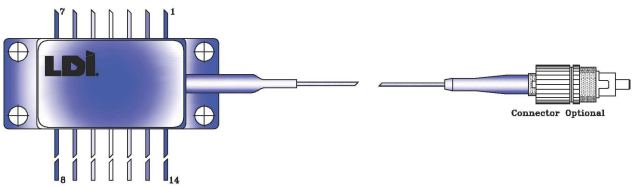
635 nm CW Fiber Coupled Laser Diode



The CWR-635-BF is a fiber coupled 635nm GaInP / GaAs laser diode packaged in a 14 pin butterfly which includes a thermal electric cooler, thermistor, and monitor photodiode. The module offers high power and is RoHS compliant.

Characteristics (T_{amb} = -10° to 50° C):

Parameter	Symbol	Conditions	Min.	Typ.	Max	Units
Optical power (fiber)	P_o	T_{ld} = 18° C	150			mW
Forward drive current	I_f	T_{ld} = 18° C, 150mW P_o		750		mA
Max forward drive current	I_f	T_{ld} = 18° C			850	mA
Threshold current	I_{th}	T_{ld} = 18° C		400		mA
Forward voltage	V_f	T_{ld} = 18° C, 150mW P_o		3	4	V
Center wavelength	λ	T_{ld} = 18° C, 150mW P_o	630	635	640	nm
Spectral width (FWHM)	$\Delta\lambda$	T_{ld} = 18° C, 150mW P_o		1		nm
Monitor current	I_{MON}	T_{ld} = 18° C, 150mW P_o, V_R = 5V		100		uA
Monitor dark current	I_D	T_{ld} = 18° C, V_R = 5V			100	nA
Monitor reverse voltage	V_R	T_{ld} = 18° C			15	V
Thermistor resistance	R_{TH}	T_{ld} = 18° C	13.48	13.66	13.84	KΩ
Thermistor B constant	B	B25/50	3910.9	3950.0	3989.9	K
Cooling capacity	ΔT	T_{ld} = 18° C, 150mW P_o	35			°C
TEC voltage	V_{tec}	T_{ld} = 18° C, 150mW P_o			2.1	V
TEC current	I_{tec}	T_{ld} = 18° C, 150mW P_o			2.2	A
Maximum TEC current	I_{tec}	T_{ld} = 18° C			2.5	A
Fiber size (SI)		105/125/245/900				um
Fiber NA	I			0.22		
Fiber length	L	Per customer requirement		No connector = 1m min.		
Connector type		Per customer requirement				
Operating temp. range	T_{op}	T_{ld} = 18° C, 150mW P_o	-10		50	°C
Storage temp. range	T_{stg}	Non operating	-40		85	°C



PIN	FUNCTION
1	TEC (+)
2	Thermistor
3	PD Anode
4	PD Cathode
5	Thermistor
6,7,8,9	N/C
10	Laser Anode
11	Laser Cathode
12	N/C
13	Case Gnd
14	TEC (-)

Personal Hazard and Handling Precautions:
ESD precautions apply.
Normal aversion reactions will protect from radiation hazards to the eye associated with devices of this kind. IEC Class 1 when operated at rated conditions.

Warranty:
Please refer to your product purchase agreement for complete details or check with your LDI sales representative.

Notice:
OSI Laser Diode Incorporated reserves the right to make changes to the products or information contained herein without notice. No liability is assumed as a result of their use or application.