

Coolerless DWDM Laser Diodes

Coolerless DWDM Laser Diodes (CDLD) Series

Product Description: Coolerless DWDM laser diodes are passive wavelength locked external cavity lasers without mode hopping at ITU DWDM wavelength grids, intended for application in analog AM, forward path CATV and other DWDM applications. These laser diodes have high output power, excellent wavelength stability and low noise performance. The lasers are packaged in standard TO56 package with a high optical coupling efficiency and inclusion of an isolator, a monitor PD and a thermistor. We have options of output fibers of SM, PM and other fibers. The products are Telcordia GR-468 qualified, and in compliance with RoHS requirement.

Application

- DWDM fiberoptic networks
- DWDM transceivers
- Fiberoptic sensors
- High performance laser sources
- CATV transmitters

Features

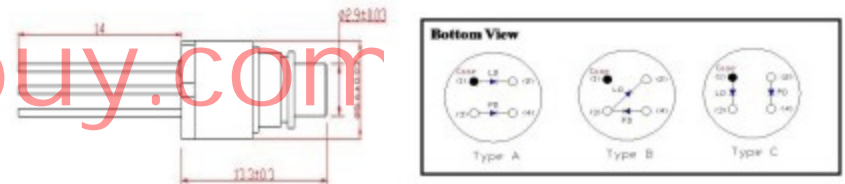
- Stable DWDM ITU wavelength grids
- High power output
- Direct 2.5G modulation laser
- TO56 package
- Built-in thermistor and optic isolator
- High reliability



Optical and Electric Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Optical Output Power	P_o	-	2	-	mW
Center Wavelength	λ_c	-	ITU grid	-	nm
Optical Isolation	ISO	30	-	-	dB
Line Width	Lw	-	500	-	kHz
Threshold Current	I_{th}	-	15	20	mA
Forward current	I_f	-	-	200	mA
Monitor Current	I_{mon}	0.25	0.7	2	mA
Monitor Dark Current	I_d	-	0.01	0.1	μ A
Laser Forward Voltage	V_{lf}	-	1.2	2	V
Laser reverse voltage	V_{lrmax}	-	-	2	V
Thermistor Resistance(25 °C)	R_{th}	9.5	-	10.5	K Ω
TEC Current	I_{tec}	-	NA	-	A
TEC Voltage	V_{tec}	-	NA	-	V
Operating current	-	-	-	-	mA
Carrier to Noise Ration	CNR	-	-	-	dB
Composite Second Power	CSO	-	-	-	dBc
Composite Triple Beat	CTB	-	-	-	dBc
Storage temperature	T_s	-40	-	85	$^{\circ}$ C
Soldering temperture for 10sec.	-	-	-	230	$^{\circ}$ C

Mecahnical Dimensions



Pin Assignment:

Pin No.	Type A	Type B	Type C
1	LD Anode(Case)	Case	LD Anode(Case)
2	LD Cathode	LD Cathode	PD Anode
3	PD Anode	LD Anode / PD Cathode	LD Cathode
4	PD Cathode	PD Anode	PD Cathode

Ordering Information

CDLD-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Code					Code	Power	Code	Fiber type	Code	Fiber length	Code	Connector
CDLD-	1	2	7	0	CWDM	0	5mW	0	SMF28e	1	50cm	0	None
	1	2	9	0		1	10mW	1	PM-1310	2	100cm	1	FC/UPC
	...	...	...	...		2	20mW	2	PM-1500	3	150cm	2	FC/APC
	1	6	1	0		4	40mW	3	Customize	4	200cm	3	LC/UPC
	8	4	8	0	DWDM	6	60mW			C	Customize	4	LC/APC
	8	4	8	5		A	100mW					5	SC/UPC
	8	4	9	0								6	SC/APC
	...	...	...	...								C	Customize
	9	7	2	5									

Example of Ordering Form: CDLD-12701020

CDLD-	1550	1	0	2	0
	Wavelength: 1550	10mW	SMF28e	100cm	no connector