

## Product Overview

### Laser Diode Module for CWDM

#### Features

- InGaAsP/InP MQW-DFB Laser
- Signal Rate up to 1.25Gb/s
- High Output Power
- Coaxial Pigtail Package
- With an internal optical isolator

#### Application

- Telecommunication
- Data Communication

#### Absolute Maximum Ratings

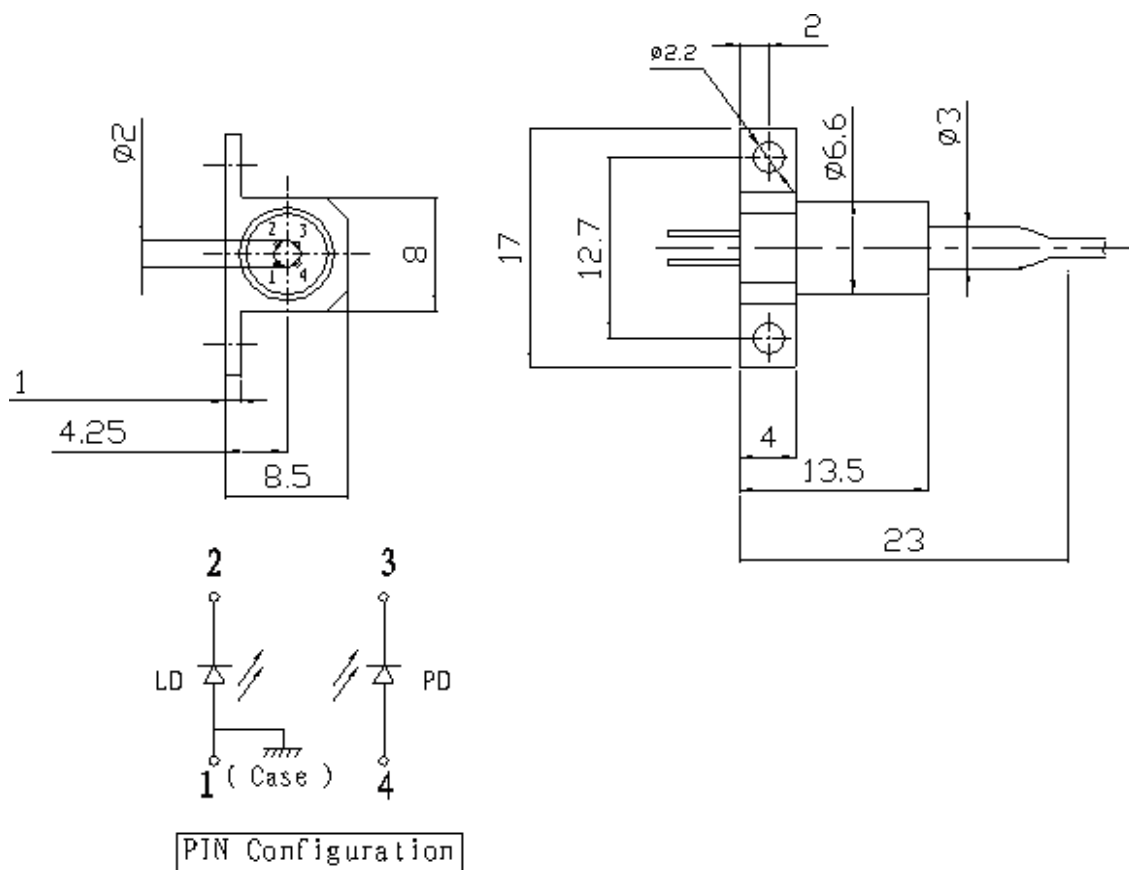
Parameter	Symbol	Min	Max	Unit
Reverse Voltage of LD	Vrl		2	V
Forward Current of PD	Ifd		2	mA
Reverse Voltage of PD	Vrd		20	V
Operating Case Temperature	Tc	-20	+70	°C
Storage Temperature	Tstg	-40	+85	°C
Lead Soldering Temperature/Time	Tsld		260/10	°C/S
connector Reflection	Rf	40		dB

#### Electrical and Optical Characteristics ( Tc=25°C, unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit	
Threshold current	Ith	CW	-	10	15	mA	
Optical output power	Pf	CW, If=Iop	1.0	-	2.0	mW	
Operating current	Iop	CW, Pf=1.0mW	20	30	40	mA	
Operating voltage	Vf	CW	-	1.2	1.8	V	
Slope efficiency	Se	CW	0.05	-	0.10	W/A	
Peak wavelength	$\lambda_p$	CW, If=Iop	1470	1467	1470	1473	nm
			1490	1487	1490	1493	
			1510	1507	1510	1513	
			1530	1527	1530	1533	
			1550	1547	1550	1553	

			1570	1567	1570	1573
			1590	1587	1590	1593
			1610	1607	1610	1613
Spectral Width	$\Delta\lambda$	CW, If=Iop -20dB down	-	-	1.0	nm
Side-mode suppression ratio	SMSR	CW, If=Iop	30	-	-	dB
Optical Isolation	Iso	- Im hold	35	-	-	dB
Tracking error	Er	(@Pf=1mW(25°C)), Tc=0~+70°C, APC	-1.0	-	1.0	dB
Rise and Fall time	Tr /Tf	Ib=Ith,10~90%	-	0.2	0.4	ns.
Monitor current	Im	CW, If=Iop, VRD=5V	100	-	-	$\mu$ A
Capacitance (PD)	Ct	Vrd=5V,f=1MHz	-	10	20	pF
Dark current (PD)	Id	Vrd=5V	-	0.1	0.5	$\mu$ A

**Package Dimensions and Pin Description:**



**Ordering Information:**

**STC**   -    -   -

Package	Isolator	Data Rate	Operation	Output power	Flange & Mounting Bracket	Connector	Wavelength
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Type		(Mb/s)	Temperature	( $\mu$ W)	Type		(nm)
1:	0:	1:	1:	1:	0:	0:	47: 1470
3 Pin pigtail	No	155	0~+70°C	100~500	No	No	47: 1490
3:	1:	2:	2:	2:	1: $\Omega$ Flange	1:	51: 1510
4 Pin pigtail	Yes	622	-40~+85°C	500~1000		FC/PC	53: 1530
		3:		3:		2:	55: 1550
		1.25G		1000~2000		FC/APC	57: 1570
		4:		4:		3:	59: 1590
		2.5G		2000~		SC/PC	61: 1610
						4:	
						SC/APC	
						5:	
						ST/PC	
						6:	
						LC/PC	

**Products:**

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