CWDM 2.5Gbps DFB Laser Diode Pigtail type Module

Features

- InGaAsP MQW-DFB laser diode (LD)
- Built-in InGaAs monitor PIN photodiode (PD)
- Uncooled, hermetically sealed
- Low threshold current
- Fiber pigtail type with optional FC/SC/ST connector
- With optional isolator

Applications

- ATM/SONET OC-48

Ordering Information

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Wavelength
47 : 1470nm
49 : 1490nm
51 : 1510nm
53 : 1530nm
55 : 1550nm
57 : 1570nm
59 : 1590nm
61 : 1610nm

Power
M
L
U

Pinout
C

Isolator
X : W/O Isolator
I : W/ Isolator

X : W/O mount
S : SP mount
U : UP mount

Connector
X : W/O connector
F : FC/PC
S : SC/PC
T : ST/PC
1 : FC/APC
2 : ST/APC
3 : SC/APC

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Specifications

Absolute Maximum Ratings

Parameter		Symbol	Value	Unit
Storage temperature		T_{stg}	-40~+85	℃
Operating case temperature		T_{op}	0~+70	℃
Peak optical output power	M	P_f	1.5	mW
	L		3.0	
	U		4.0	
Reverse voltage (LD)		V_{RL}	2	V
Forward current (PD)		I_{FP}	2	mA
Reverse voltage (PD)		V_{RP}	15	V
Soldering temperature (10 sec.)		S_{temp}	260	℃

Electrical and Optical Characteristics (T_C=25℃, unless otherwise specified)

Parameter		Symbol	Condition	MIN.	TYP.	MAX.	Unit
Threshold current		I_{th}	CW	-	10	20	mA
Center Wavelength		λ_C	P_f	λ_C-3	-	λ_C+3	nm
Fiber output power	M	P_f	CW, I_{th} +25mA	0.5	-	1.0	mW
	L			1.0	-	1.75	
	U			2.0	-	-	
Slope efficiency	M	Se	CW	0.02	-	0.04	mW/mA
	L			0.04	-	0.07	
	U			0.07	-	-	
Operating voltage		V_{op}	P_f	-	-	1.7	V
Side mode suppression ratio		SMSR	CW, 0℃~+70℃	30	-	-	dB
Rise time		T_r	$I_b = I_{th}$, 20%~80%, 0℃~+70℃	-	-	0.25	nsec
Fall time		T_f	$I_b = I_{th}$, 80%~20%, 0℃~+70℃	-	-	0.3	nsec
Tracking error		$\triangle P_f / P_f$	APC , 0℃~+70℃	-	±1.0	-	dB
Monitor current		I_m	P_f	50	-	-	μA
Monitor dark current		I_d	V_{RP} = 5V	-	-	0.01	μA
Monitor capacitance		C	V_{RP} = 5V, f=1MHz	-	-	10	pF

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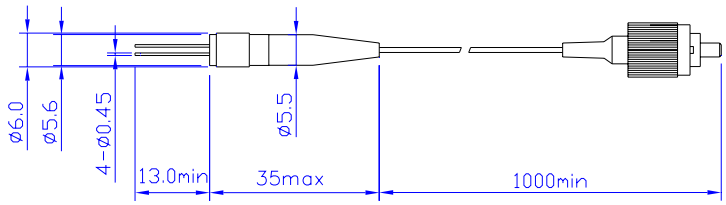
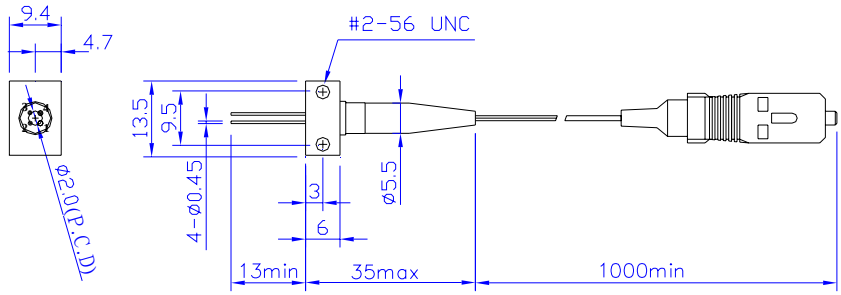
Pin Assignment

Package Outline Drawing

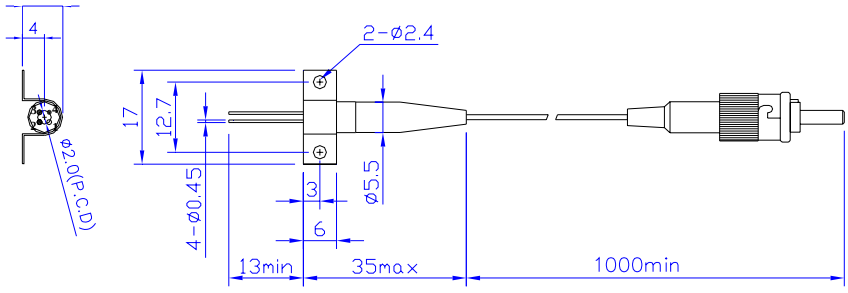
W/O Mount **FC**



SP Mount **SC**



UP Mount **ST**



Unit : mm

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