

C-15-DFB2.5-XD-SXXXX-X



Features

- Uncooled laser diode with MQW structure
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- Single frequency operation with high SMSR

Application

- Designed for 2.5 Gbps high speed optical networks

Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Fiber Output Power	P_f	0.6	mW
L			
M			
H			
LD Reverse Voltage	V_{rld}	2	V
PD Reverse Voltage	V_{rpd}	10	V
PD Forward Current	I_{fpd}	2	mA
Operating Temperature	T_{opr}	0 to +70	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +85	$^\circ\text{C}$

Optical and Electrical Characteristics ($T_c = 25^\circ\text{C}$)

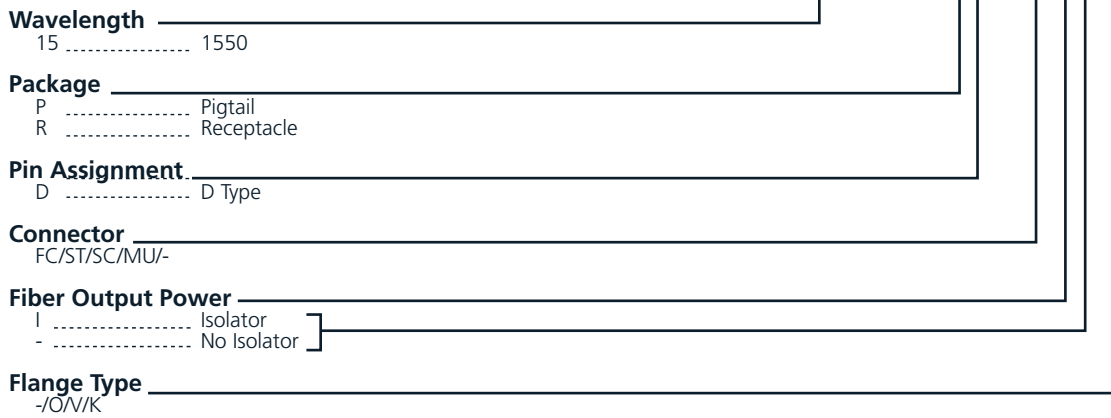
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold Current	I_{th}	-	10	15	mA	CW
Fiber Output Power	P_f	0.2	-	0.5	mW	CW, $I_{th}+30$ mA, kink free
L						
M						
H						
Peak Wavelength*	λ	1535	1550	1565	nm	
Side mode Suppression	S_r	30	35	-	dB	CW, $P_f = P_f(\text{Min})$, 0 to +70 $^\circ\text{C}$
Forward Voltage	V_F	-	1.2	1.5	V	CW, $P_f = P_f(\text{Min})$
Rise, Fall Time	t_r, t_f	-	-	150	ps	$I_{bias}=I_{th}$, 10 to 90%
Tracking Error	$\Delta P_f / P_f$	-	-	± 1.5	dB	APC, 0 to +70 $^\circ\text{C}$
PD Monitor Current	I_m	100	-	-	μA	CW, $P_f=P_f(\text{Min})$, $V_{rpd} = 2\text{V}$
PD Dark Current	I_{DARK}	-	-	0.1	μA	$V_{rpd} = 5\text{V}$
PD Capacitance	C_t	-	6	15	pF	$V_{rpd} = 5\text{V}$, $f = 1\text{MHz}$

(All optical data refer to a coupled 9/125 μm SM fiber)
*Selected wavelength is available for WDM application.

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ORDERING INFORMATION

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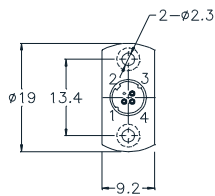
2.5 Gbps DFB LD Modules-receptacle

LD Pin Assignment

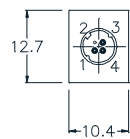
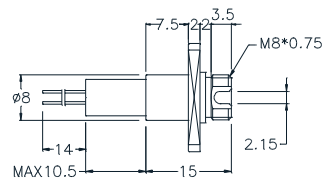
Units in mm



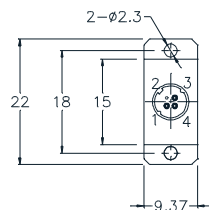
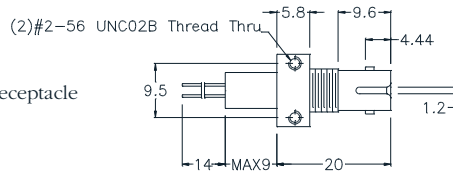
Connector Type



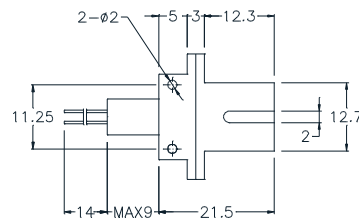
FC Receptacle



ST Receptacle



SC Receptacle



TOSA(FC,ST,SC,LC)
Customer Specified

