

Features

- Uncooled laser diode with MQW structure
- 5mW CW operation at 0~70°C
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- Designed for 2.5Gbps high speed optical networks
- Single frequency operation with high SMSR

Packaging

- TO-18 with a flat window cap or Ball lens cap

Note:

1. Pin assignment can be customized.
2. Specifications subject to change without notice.

Handling Precautions

This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Value	Unit
Optical Output Power	P _o	6(CW)	mW
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~+70	°C
Storage Temperature	T _{stg}	-40~+100	°C

Optical and Electrical Characteristics(Tc=25°C)

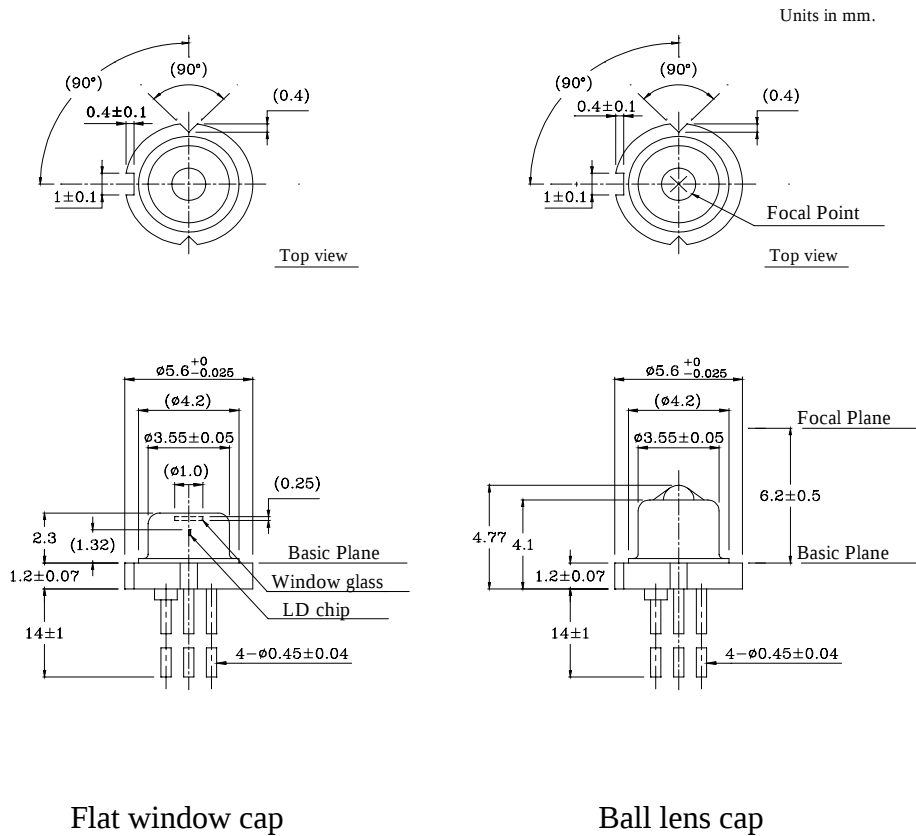
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Slope Efficiency	SE	0.15	0.25	-	mW/mA	CW, P _o =5mW
flat window cap						
Ball lens cap						
Threshold Current	I _{th}	-	10	15	mA	CW
Optical Output Power	P _o	3	4	-	mW	CW, I=I _{th} +20mA
Peak Wavelength*	λ	n-2	n	n+2	nm	Note
Side mode Suppression	S _r	30	35	-	dB	CW, P _o =5mW(0~70°C)
Forward Voltage	V _F	-	1.2	1.5	V	CW, P _o =5mW
Temperature dependence of peak wavelength	Δλ _p /ΔT	0.08	0.1	0.12	nm/°C	CW, P _o =5mW(0~70°C)
Beam Divergence	θ _∥	-	25	-	deg.	CW, P _o =5mW, FWHM
	θ _⊥	-	35	-		
Rise/Fall Time	t _r / t _f	-	-	150	ps	I _{bias} =I _{th} , 10-90 %
PD Monitor Current	I _m	100	200	800	μA	CW, P _o =5mW, V _{RPD} =2V
PD Dark Current	I _{DARK}	-	-	0.1	μA	V _{RPD} =5V
PD Capacitance	C _i	-	6	15	pF	V _{RPD} =5V, f=1MHz

Optical and Electrical Characteristics(Tc=70°C)

Threshold Current	I _{th}	-	-	50	mA	CW
Optical Output Power	P _o	6	-	-	mW	CW, I=I _{th} +60mA flat window cap

Note: Selected wavelength is available for WDM application.

*Peak wavelength n=1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm



LD Pin Assignment

Model	PIN Assignment (Bottom View)
D-type	