

Features

- Uncooled laser diode with MQW structure
- 5mW CW operation at 0~70℃
- High temperature Operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- Designed for 2.5G high speed, long reach optical network
- Single frequency Operation with high SMSR

Packaging

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

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℃)

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	℃
Storage Temperature	T _{stg}	-40~+100	℃

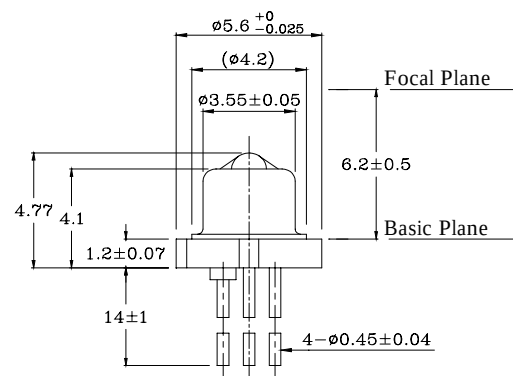
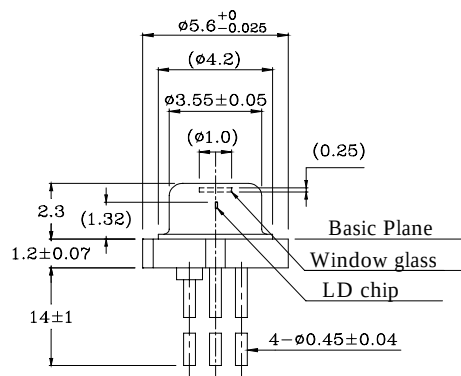
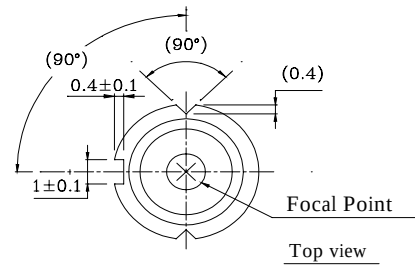
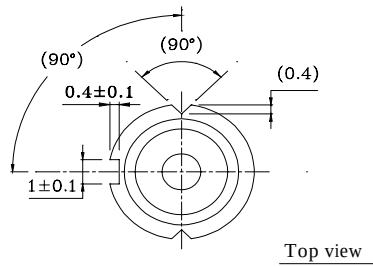
Optical and Electrical Characteristics(Tc=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Slope Efficiency C-15-DFB2.5-E-AD-NT	SE	0.15	0.25	-	mW/mA	CW, P _o =5mW
Threshold Current	I _{th}	-	10	15	mA	CW, P _o =5mW
Optical Output Power	P _o	5	-	-	mW	CW, kink free
Peak Wavelength	λ	1535	1550	1565	nm	
Side mode	Sr	30	35	-	dB	CW, P _o =5mW(0~70℃)
Forward Voltage	V _F	-	1.2	1.5	V	CW, P _o =5mW
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 _t	-	6	15	pF	V _{RPD} =5V, f=1MHz

Optical and Electrical Characteristics(Tc=70℃)

Threshold Current	I _{th}	-	-	50	mA	CW, P _o =5mW
Peak power current	I _{Peak}	-	-	100	mA	CW, P _o =8mW

Units in mm.



LD Pin Assignment

Model	PIN Assignment (Bottom View)
C-15-DFB2.5-E-AD-NT	
C-15-DFB2.5-E-BD-NT	