

Features

- Uncooled laser diode with MQW structure
- 5mW CW operation at -40~85°C
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- Designed for 2.5G high speed, optical network

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.

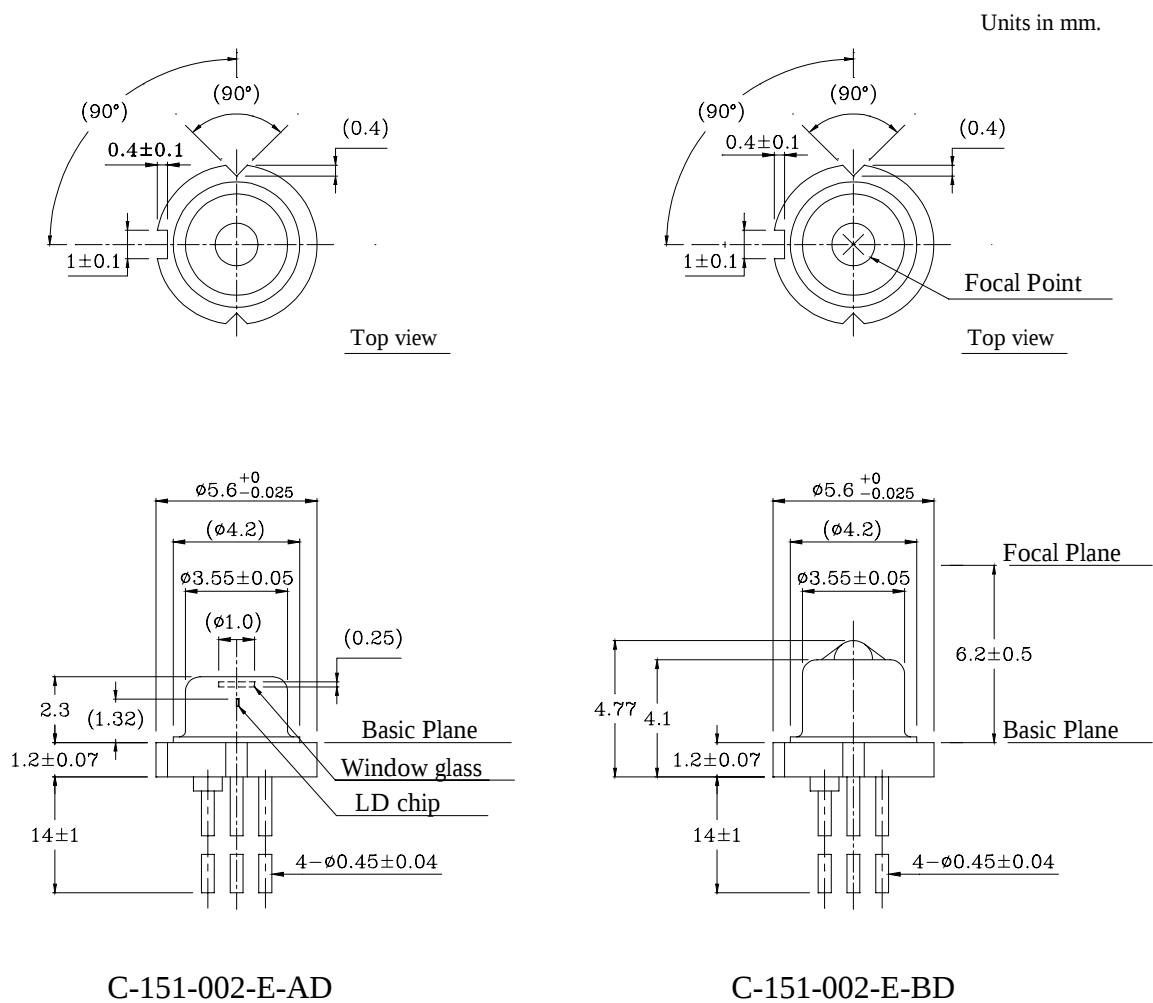
Absolute Maximum Ratings(Tc=25°C)

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}	2.0	mA
Operating Temperature	T _{opr}	-40~+85	°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 C-151-002-E-AD C-151-002-E-BD	SE	0.2 0.15	0.25 0.18	-	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	1490	1510	1530	nm	CW, P _o =5mW
Spectral Width	Δλ	-	2	5	nm	CW, P _o =5mW
Forward Voltage	V _F	-	1.2	1.5	V	CW, P _o =5mW
Beam Divergence	θ _{//}	-	20	-	deg.	CW, P _o =5mW, FWHM
	θ _⊥	-	40	-		
Rise/Fall Time	t _r / t _f	-	-	150	ps	I _{bias} =I _{th} , 10-90 %
PD Monitor Current	I _m	100	-	-	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

Note: Selected wavelength is available for WDM application



LD Pin Options	
Model	PIN Assignment (Bottom View)
C-151-002-E-AD	
C-151-002-E-BD	