

C-151-001-E-XX



Features

- Uncooled laser diode with MQW structure
- 5mW CW operation at -40 to +85°C
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- To-18 with a flat window cap or a ball lens cap

Absolute Maximum Rating (Tc=25°C)

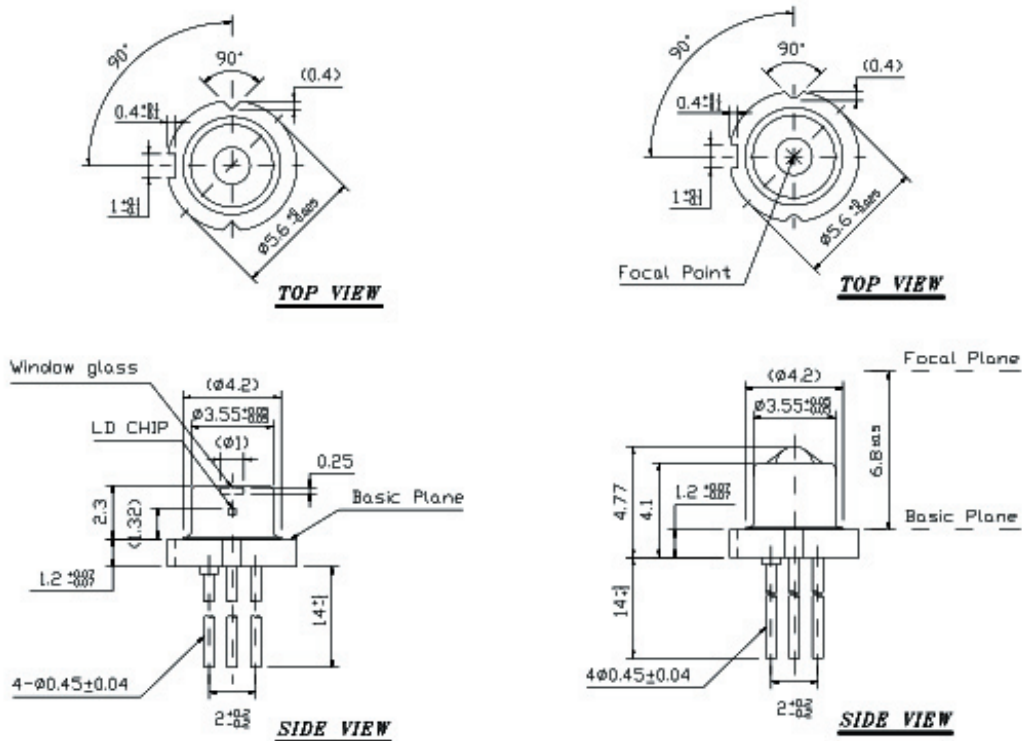
Parameter	Symbol	Value	Unit
Optical Output Power	P _o	6 (CW)	mW
LD Reverse Voltage	V _{RLD}	2	V
LD Forward Current	I _{FLD}	150	mA
PD Reverse Voltage	V _{RPD}	10	V
PD Forward Current	I _{FPD}	2.0	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C

Optical and Electrical Characteristics(Tc=25°C)

Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Slope Efficiency	SE					
Flat window cap		0.2	0.25	-	mW/mA	CW, P _o =5mW
Ball lens cap		0.15	0.18			
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 θ _⊥	- -	20 40	-	deg.	CW, P _o =5mW, FWHM
Rise/Fall Time	t _r /t _f	-	-	0.5	ns	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

Mechanical Drawing

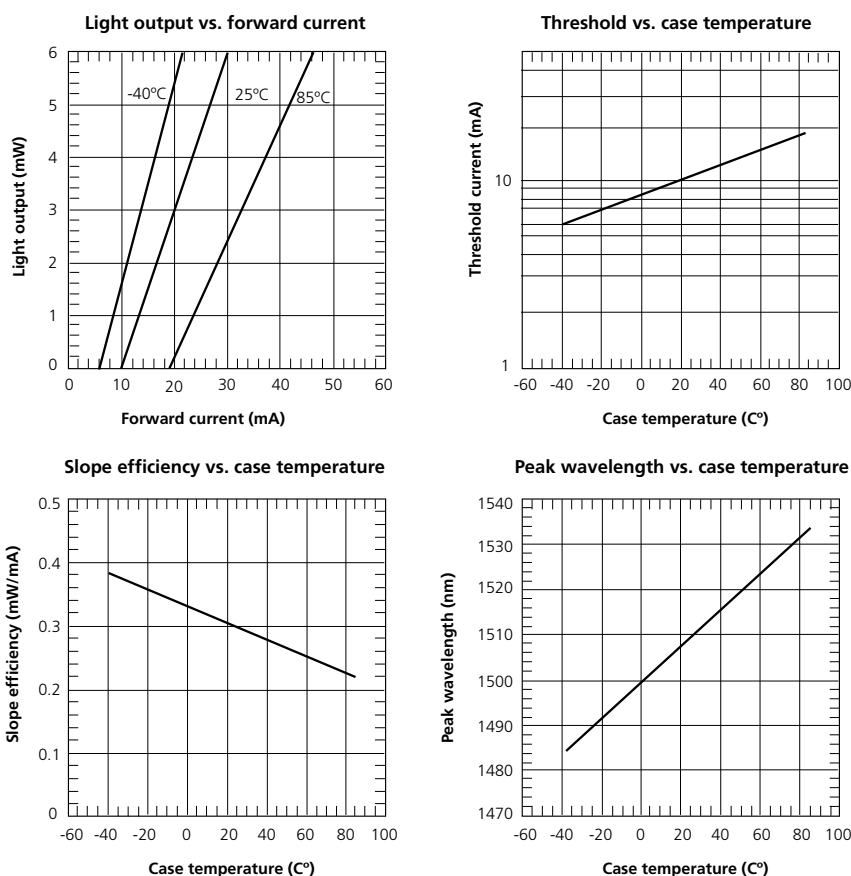


Flat window cap
A- type B- type D- type

Ball Lens cap
A- type B- type D- type

LD Pin Assignment

Model	PIN Assignment (Bottom View)
A-type	
B-type	
D-type	



Warnings

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.

Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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