

C-1XXXXA-DFB-E-XX-NT



Absolute Maximum Rating (Tc=25°C)

Parameter	Symbol	Value	Unit
Optical Output Power	P _o	8(CW)	mW
LD Reverse Voltage	V _{RLD}	2	V
LD Forward Current	I _{FLD}	150	mA
PD Reverse Voltage	V _{RPD}	15	V
PD Forward Current	I _{FPD}	2	mA
Operating Temperature	T _{opr}	0 to +70	°C
Storage Temperature	T _{stg}	-40 to +85	°C

Optical and Electrical Characteristics(Tc=70°C)

Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Threshold Current	I _{th}	-	-	50	mA	CW
Optical Output Power	P _o	6	8	-	mW	CW, I=I _{th} +60mA

Optical and Electrical Characteristics(Tc=25°C)

Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Threshold Current	I _{th}	-	-	20	mA	CW
Optical Output Power	P _o	3	4	-	mW	CW, I=I _{th} +20mA
Peak Wavelength*	λ	n-3	n	n+3	nm	CW, P _o =5mW
Side Mode Suppression Ratio	S _r	30	35	-	dB	CW, P _o =5mW (0 to 70°C)
Forward Voltage	V _F	-	-	1.7	V	CW
Temperature dependence of peak wavelength	Δλ _p /ΔT	-	0.1	0.12	nm/°C	CW, P _o =5mW (0 to 70°C)
Rise/Fall Time	t _r / t _f	-	-	0.5	ns	I _{bias} =I _{th} , 20-80%
Spectral Width	Δλ	-	-	1	nm	CW, P _o =5mW, -20dB
PD Monitor Current	I _m	100	-	1200	μA	CW, P _o =5mW, V _{RPD} =5V
PD Dark Current	I _{DARK}	-	0.3	1.0	μA	V _{RPD} =5V
PD Capacitance	C _t	-	10	-	pF	V _{RPD} =5V, f=1MHz

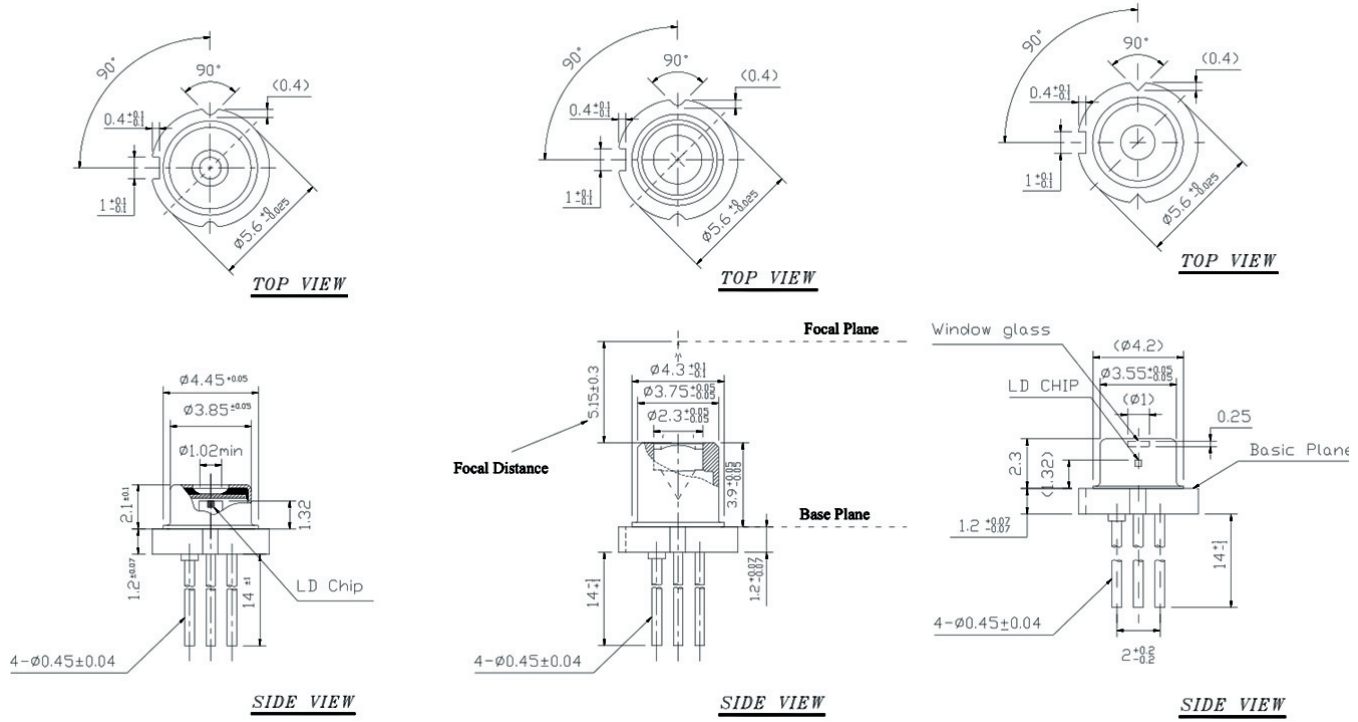
* Peak wavelength n=1270nm,1290nm,1310nm,1330nm,1350nm,1370nm,1390nm,1410nm,1430nm,1450nm,1470nm,1490nm, 1510nm,1530nm,1550nm, 1570nm,1590nm,1610nm

* Precaution:

- 1.Avoid eye or skin exposure to laser radiations.
- 2.The device is sensitive to the electro-static damages (ESD). The device should be handled with ESD proof tools. To assemble the device on PCB, proper grounding is required to prevent ESD
- 3.The performance and reliability of the device are not guaranteed when it is operated under environment with strong vibration .

C-1XXXXA-DFB-E-XX-NT

Mechanical Drawing



C-1XXXXA-DFB-E-LA-NT
 C-1XXXXA-DFB-E-LAB-NT
 C-1XXXXA-DFB-E-LAD-NT

C-1XXXXA-DFB-E-A-NT
 C-1XXXXA-DFB-E-AB-NT
 C-1XXXXA-DFB-E-AD-NT

C-1XXXXA-DFB-E-H-NT
 C-1XXXXA-DFB-E-HB-NT
 C-1XXXXA-DFB-E-HD-NT

LD Pin Assignment	
Model	PIN Assignment (Bottom View)
C-1XXXXA-DFB-E-LA-NT C-1XXXXA-DFB-E-H-NT C-1XXXXA-DFB-E-A-NT	
C-1XXXXA-DFB-E-LAB-NT C-1XXXXA-DFB-E-HB-NT C-1XXXXA-DFB-E-AB-NT	
C-1XXXXA-DFB-E-LAD-NT C-1XXXXA-DFB-E-HD-NT C-1XXXXA-DFB-E-AD-NT	

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C-1XXXXA-DFB-E-XX-NT

Ordering Information

Available Options:

C-1XXXXA-DFB-E-LA-NT
C-1XXXXA-DFB-E-LAB-NT
C-1XXXXA-DFB-E-LAD-NT
C-1XXXXA-DFB-E-H-NT
C-1XXXXA-DFB-E-HB-NT
C-1XXXXA-DFB-E-HD-NT
C-1XXXXA-DFB-E-A-NT
C-1XXXXA-DFB-E-AB-NT
C-1XXXXA-DFB-E-AD-NT

Note : 1XXXXA : 1270A ~ 1610A

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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