



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 _{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-2 | n | n+2 | 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/ΔT | - | 0.1 | 0.12 | nm/°C | CW, P _o =5mW (0 to 70°C) |
| Rise/Fall Time | t _r / t _f | - | - | 150 | ps | I _{bias} =I _{th} , 20%- 80% Lead Length<1mm |
| 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 |

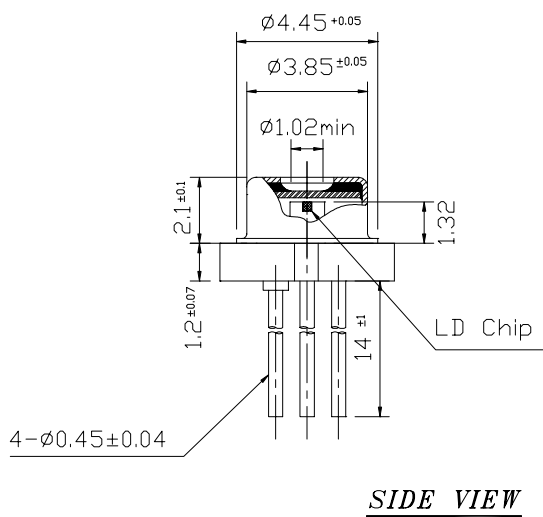
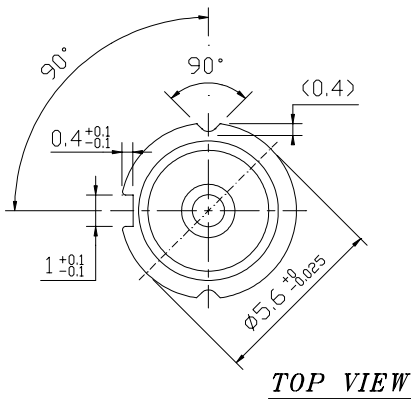
* Peak wavelength n=1270nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm, 1390nm, 1410nm, 1430nm, 1450nm, 1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm

* Precaution :

1. Avoid eye 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 strong vibration environment.

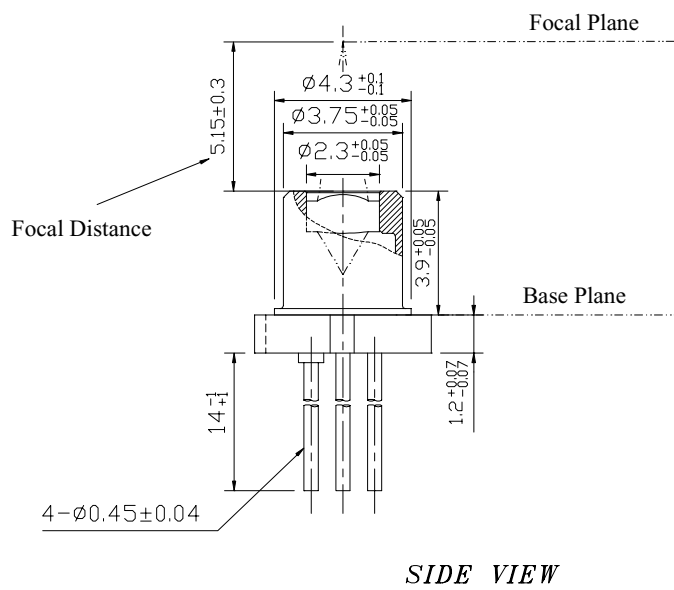
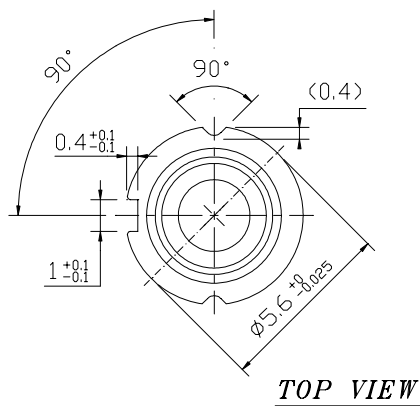
Mechanical Drawing

All dimensions in mm



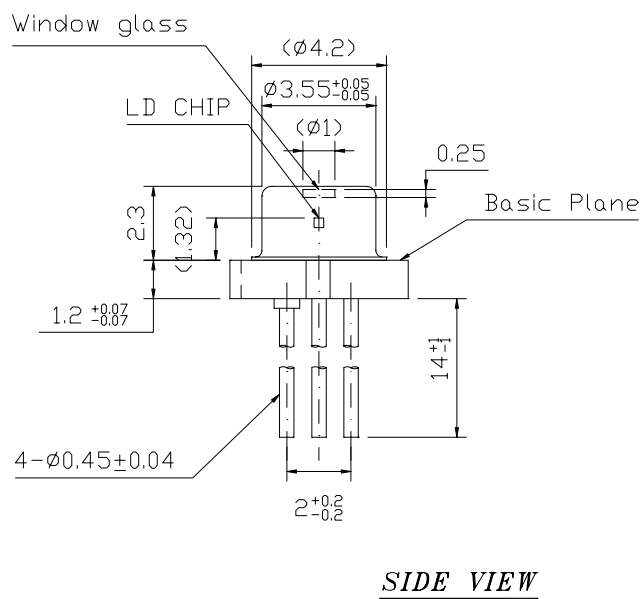
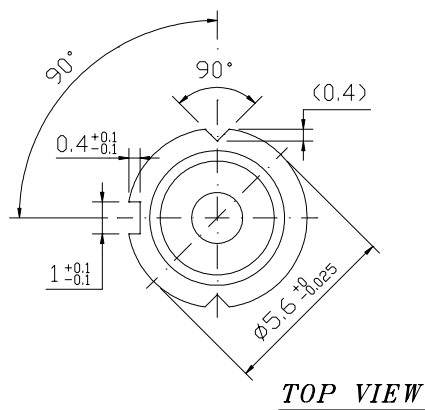
C-1XXX-DFB2.5-E-LA-NT
 C-1XXX-DFB2.5-E-LAB-NT
 C-1XXX-DFB2.5-E-LAD-NT

All dimensions in mm



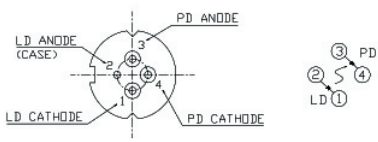
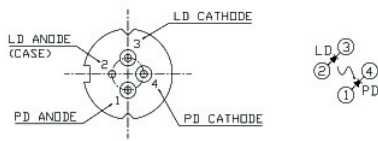
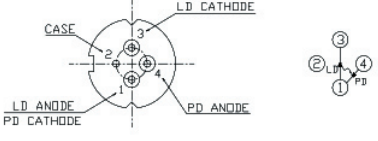
C-1XXX-DFB2.5-E-H-NT
 C-1XXX-DFB2.5-E-HB-NT
 C-1XXX-DFB2.5-E-HD-NT

All dimensions in mm



C-1XXX-DFB2.5-E-A-NT
 C-1XXX-DFB2.5-E-AB-NT
 C-1XXX-DFB2.5-E-AD-NT

C-1XXX-DFB2.5-E-XX-NT

| LD Pin Assignment | |
|--|---|
| Model | PIN Assignment (Bottom View) |
| C-1XXX-DFB2.5-E-LA-NT C-1XXX-DFB2.5-E-H-NT C-1XXX-DFB2.5-E-A-NT |  |
| C-1XXX-DFB2.5-E-LAB-NT C-1XXX-DFB2.5-E-HB-NT C-1XXX-DFB2.5-E-AB-NT |  |
| C-1XXX-DFB2.5-E-LAD-NT C-1XXX-DFB2.5-E-HD-NT C-1XXX-DFB2.5-E-AD-NT |  |

Ordering Information

Available Options:

C-1XXX-DFB2.5-E-LA-NT
C-1XXX-DFB2.5-E-LAB-NT
C-1XXX-DFB2.5-E-LAD-NT
C-1XXX-DFB2.5-E-H-NT
C-1XXX-DFB2.5-E-HB-NT
C-1XXX-DFB2.5-E-HD-NT
C-1XXX-DFB2.5-E-A-NT
C-1XXX-DFB2.5-E-AB-NT
C-1XXX-DFB2.5-E-AD-NT

Note : 1XXX : 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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