



# 685nm Laser Diode

## ■ Features

Output Power: 55mW (CW)  
Efficient Quantum Well Structure  
Standard TO-18 Package



## ■ Absolute Maximum Ratings

(Tc=25°C)

| Item                       | Symbol  | Absolute Maximum Ratings | Unit |
|----------------------------|---------|--------------------------|------|
| Optical Output Power       | Po      | 55                       | mW   |
| LD Reverse Voltage         | Vr (LD) | 2                        | V    |
| Storage Temperature        | Tstg    | -40~85                   | °C   |
| Operating Case Temperature | Tc      | -10~70                   | °C   |

## ■ Initial Electrical/Optical Characteristics

(Tc=25°C)

| Item                       | Symbol | Typ.   | Unit |
|----------------------------|--------|--------|------|
| Optical Output             | Po     | 55     | mW   |
| Peak Wavelength*           | λp     | 685±10 | nm   |
| Threshold Current          | Ith    | ≤0.030 | A    |
| Operating Current          | Iop    | ≤0.075 | A    |
| Slope Efficiency           | η      | ≥1.1   | W/A  |
| Operating Voltage          | Vop    | ≤2.3   | V    |
| Horizontal Beam Divergence | θ//    | ≤9     | deg. |
| Vertical Beam Divergence   | θ⊥     | ≤21    | deg. |
| Polarization               |        | TE     |      |

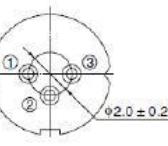
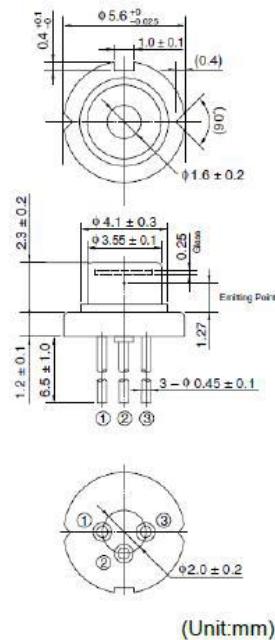
\* Measuring specifications.

All figures in this specification are measured by CNI's method and may contain measurement deviations.

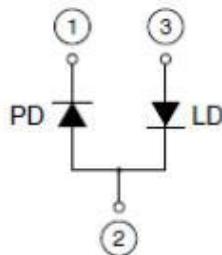
The above specifications are for reference purpose only and subjected to change without prior notice.

## Outline Dimension

### TO-18 Package



(Unit:mm)



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