

IR Laser Diode

Application

Industrial use / Biomedical

Property

Wavelength $\lambda = 980\text{nm}$

Output Power = 50mW

Package Type = $\varphi 5.6\text{mm}$

Introduction

Egismos currently markets AlGaAs infrared laser diodes in the 780nm ~ 1550nm wavelengths range. The low operating current and high temperature of the laser diodes are achieved through using misoriented substrate and MQW (Strain compensated) active layer.

Egismos laser diodes are highly rated in a broad range of applications including, but not limited to, laser pointers, green lasers, blue laser DVD, laser barcode scanners, diode laser equipments, medical instruments and aerospace applications.



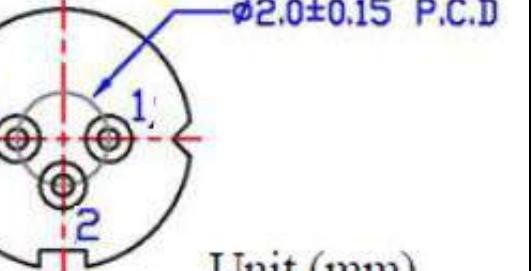
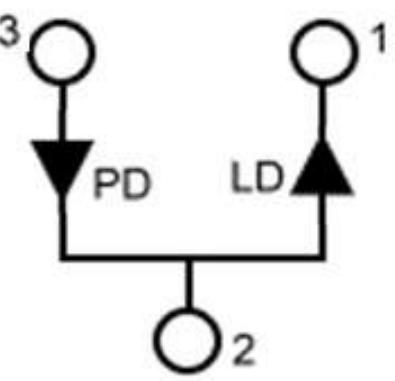
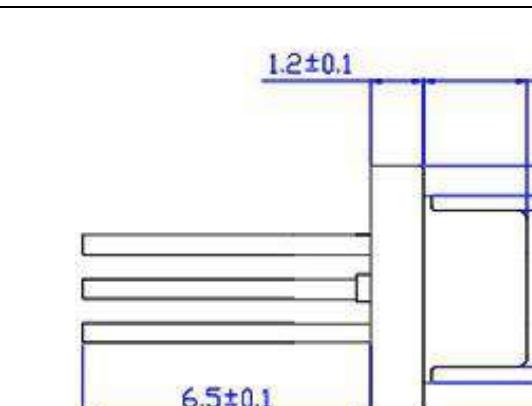
IR Laser Diode Key features

| Absolute Maximum Rating at $T_c=25^\circ\text{C}$ | | | |
|---|------------------|---------|------|
| Items | Symbols | Values | Unit |
| Optical Output Power | $P_o(\text{CW})$ | 50 | mW |
| Reverse Voltage | V | 2 | V |
| Operating Temperature | T_o | -10~+40 | °C |
| Storage Temperature | T_s | -10~+70 | °C |

Electrical and Optical Characteristics at $T_c=25^\circ\text{C}$

| Item | Symbols | Min | Typ. | Max. | Unit | Condition |
|----------------------|-------------|-----|------|------|------|-------------------|
| Optical Output Power | P_o | - | - | 50 | mW | - |
| Threshold Current | I_{th} | - | 12 | 20 | mA | - |
| Operating Current | I_{op} | - | 75 | 100 | mA | $P_o=50\text{mW}$ |
| Operating Voltage | V_{op} | 1 | 1.5 | 2.1 | V | $P_o=50\text{mW}$ |
| Peak Wavelength | λ_p | 970 | 980 | 990 | nm | $P_o=50\text{mW}$ |

| | | | | | | |
|-----------------|------------------|----|----|----|-----|---------|
| Beam Divergence | $\theta_{//}$ | 8 | 13 | 18 | deg | Po=50mW |
| | θ_{\perp} | 25 | 30 | 35 | deg | Po=50mW |

| Electrical Connection(Bottom View) | Package Type |
|--|---|
|  <p data-bbox="241 756 773 900">Unit (mm) Bottom View</p> |  <p data-bbox="946 900 1341 932">PD LD</p> |
| Package Drawing | |
|  | |

Specifications are subject to change without notice.

