# INFRARED LASER DIODE

# DL-LS2032 Tentative

SANYO

Ver.1 Jan. 2003

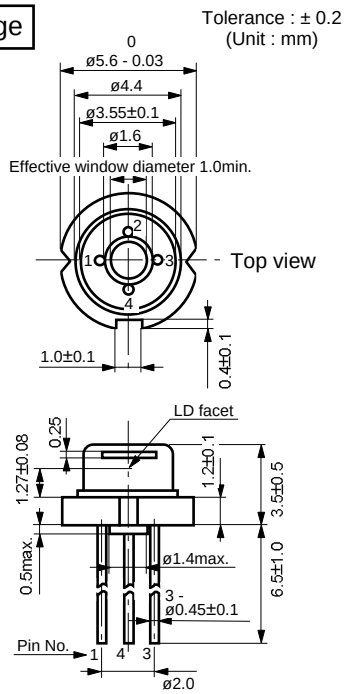
## Features

- Lasing wavelength : 808 nm (Typ.)
- Single longitudinal mode
- High output power : 100 mW at 50°C
- Low threshold current : Ith = 40 mA (Typ.)
- Fundamental transverse mode
- Small package : ø5.6 mm

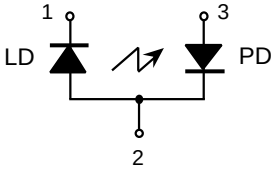
## Applications

- Solid state laser pumping

## Package




## Pin Connection




## Absolute Maximum Ratings

(Tc=25°C)

| Parameter | | Symbol | Ratings | Unit |
|---|---|---|---|---|
| Light Output | CW | Po | 110 | mW |
| Reverse Voltage | Laser | VR | 2 | V |
| | PD | | 30 | |
| Operating Temperature | | Topr | -10 to +50 | °C |
| Storage Temperature | | Tstg | -40 to +85 | °C |

## Electrical and Optical Characteristics 1) 2)

(Tc=25°C)

| Parameter | | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| Threshold Current | | Ith | CW | - | 40 | 60 | mA |
| Operating Current | | Iop | Po=100mW | - | 125 | 160 | mA |
| Operating Voltage | | Vop | Po=100mW | - | 2.0 | 2.4 | V |
| Lasing Wavelength * | | Lp | Po=100mW | 798 | 808 | 818 | nm |
| Beam Divergence 3) | Perpendicular | Qv | Po=100mW | 12 | 16 | 20 | ° |
| | Parallel | Qh | Po=100mW | 6 | 8 | 10 | ° |
| Off Axis Angle | Perpendicular | dQv | - | - | - | ± 3 | ° |
| | Parallel | dQh | - | - | - | ± 3 | ° |
| Differential Efficiency | | dPo/dIop | - | 0.8 | 1.2 | - | mW/mA |
| Monitoring Output Current | | Im | Po=100mW | 0.1 | 0.3 | 0.6 | mA |
| Astigmatism | | As | Po=100mW | - | 3 | - | µm |

1) Initial values 2) All the above values are evaluated with Tottori Sanyo's measuring apparatus
3) Full angle at half maximum

Note : The above product specification are subject to change without notice.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* Lasing Wavelength Selection Classification

| Type | Lasing Wavelength (nm) |
|---|---|
| DL-LS2032A | 808 ± 3 |
| DL-LS2032B | 808 ± 5 |
| DL-LS2032C | 808 ± 10 |