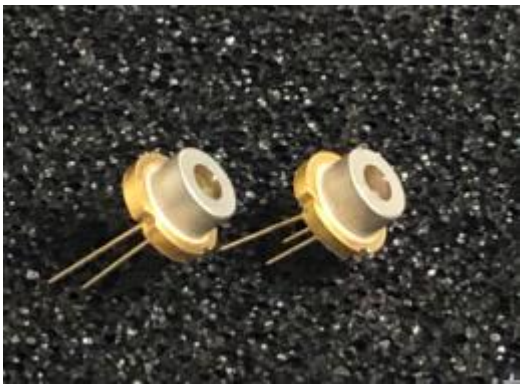
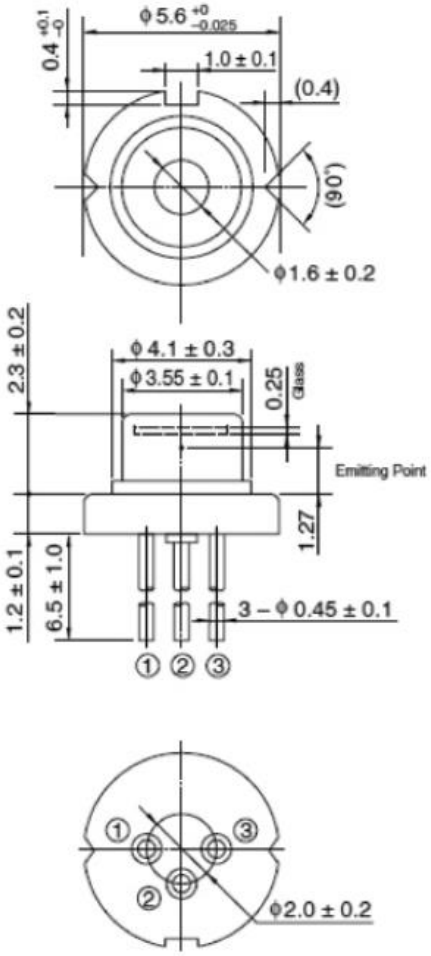
## Pulsed Laser Diode






1, N/C
2, Cathode/Case
3, Anode

All dimension are in millimeters.

## Description

OTRON PLD series are applicated for laser range finders For golfers, hunters, civil engineers , lidar etc. distance Measurement.

## Features

* Optical peak power up to 30W
* Laser wavelength 1550nm

## Absolute Maximum Ratings (Ta=25℃)

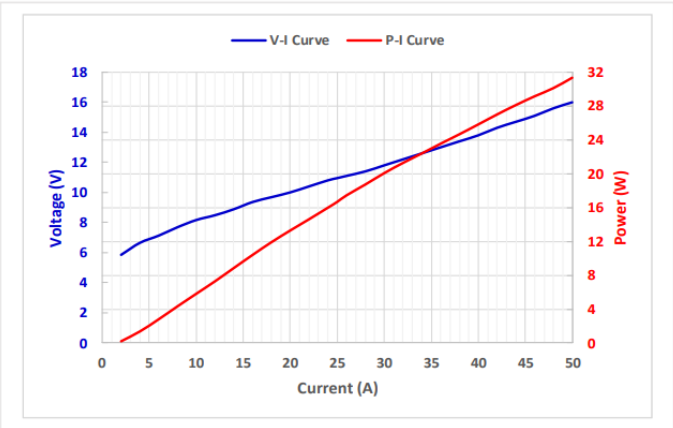
| Item | Symbol | Values | | Unit |
|---|---|---|---|---|
| Peak output power | $P_D$ | - | 90 | W |
| Forward current | $I_F$ | - | 80 | A |
| Pulse width (FWHM) | $t_P$ | - | 150 | ns |
| Duty cycle | dc | - | 0.1 | % |
| Reverse voltage | $V_R$ | - | 6 | V |
| Operating temperature | Topr. | -40~+85 | | ℃ |
| Storage temperature | Tstg. | -40~+100 | | ℃ |

OTRON ELECTRONIC TECHNOLOGY CO., LTD
TEL:+86-21-54971821
FAX:+86-21-54971823
EMAIL: frank.shuai@e-otron.com
http://www.e-otron.com

## ELECTRO-OPTICAL CHARACTERISTICS (Ta=25℃)

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Peak output power | Po | | - | 30 | - | W |
| Peak wavelength | $\lambda_P$ | | - | 1550 | - | nm |
| Operation mode | | | - | QCW | - | |
| Pulse width | t | | - | 200 | - | ns |
| Pulse repetition frequency | f | | | 5 | | KHz |
| Duty cycle | D | | | 0.1 | | % |
| Aperture size | W*h | | | 190*10 | | $um^2$ |
| Cavity length | L | | | 2000 | | um |
| Chip width | W | | | 500 | | um |
| Chip height | H | | | 150 | | um |
| Threshold current | Ith | | | 0.6 | | A |
| Operating current | Iop | | | 48 | | A |
| Operating voltage | Vop | | | 15.6 | | V |
| Slope efficiency | η d=Po/(Iop - Ith) | | | 0.80 | | W/A |
| Total conversion efficiency | η =Po/(Iop x Vop) | | | 4 | | % |
| Spectral width | △λ | | | 15 | | nm |
| Slow axis divergence | $\theta_{II}$ | | | 12 | | ° |
| Fast axis divergence | $\theta_{\perp}$ | | | 36 | | ° |
| Temperature coefficient of wavelength | △λ/△T | | | 0.28 | | nm/C |
| Polarization | | | | TE | | |

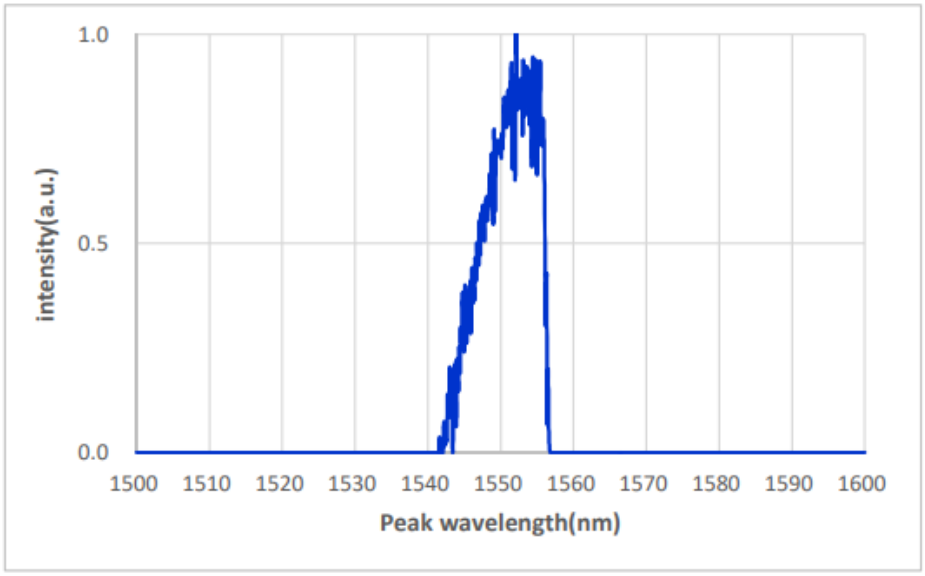
Forward current Vs. Peak power(Ta=25℃)　　Forward voltage Vs. Peak power(Ta=25℃)




Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission.

Specifications are subject change without notice.

Relative spectral emission




Far field emission parallel and perpendicular to junction plane