

## Infrared Light Emitting Diode

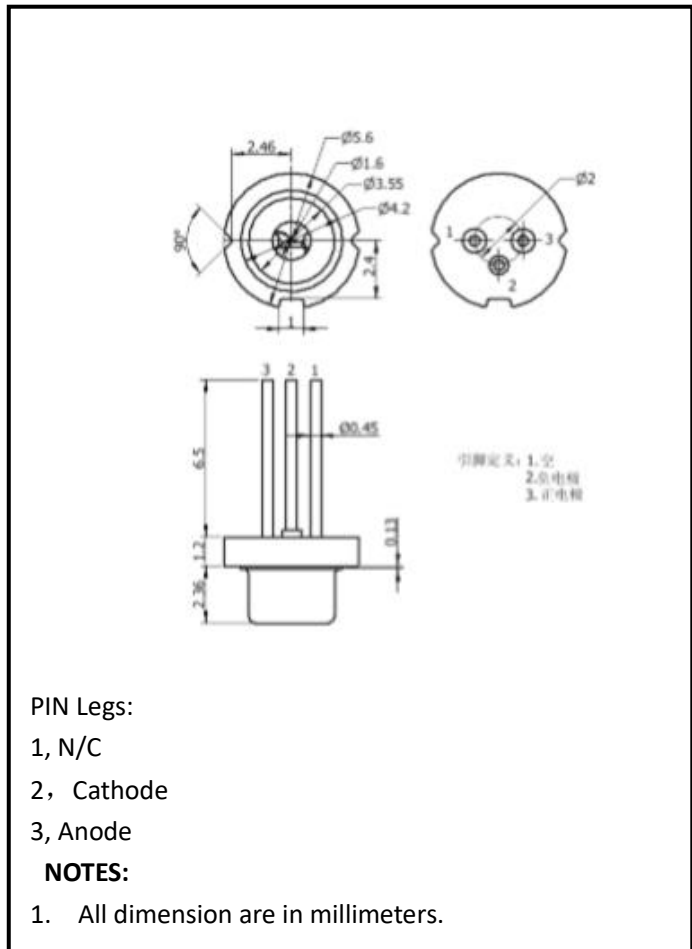


### Description

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

### Features

- \* Optical peak power up to 25W
- \* Laser wavelength 905nm
- \* Laser aperture 75um\*10um



### Absolute Maximum Ratings (Ta=25°C unless otherwise stated)

Item	Symbol	Values		Unit
Peak output power	P <sub>D</sub>	-	35	W
Forward current	I <sub>F</sub>	-	15	A
Pulse width (FWHM)	t <sub>p</sub>	-	200	ns
Duty cycle	dc	-	0.1	%
Reverse voltage	V <sub>R</sub>	-	3	V
Operating temperature	Topr.	-40~+85		°C
Storage temperature	Tstg.	-40~+100		°C
Soldering temperature*1	Tsol.	260		°C

\*1: 3mm from case for 10sec

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.

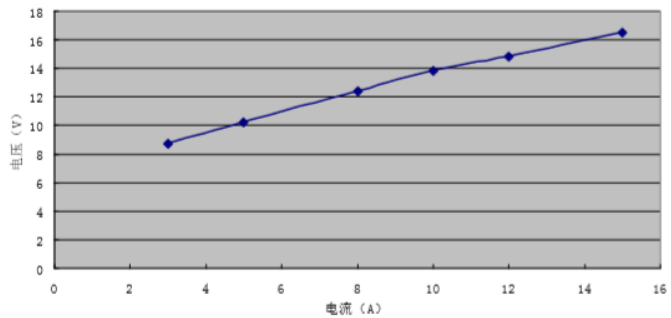
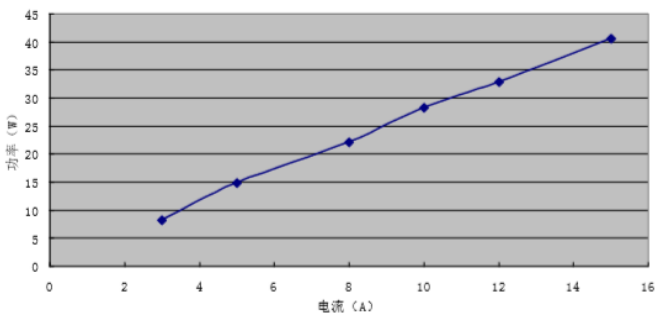


ELECTRO-OPTICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak output power	P <sub>O</sub>		20	25	30	mW
Peak wavelength	λ <sub>P</sub>		895	905	915	nm
Spectral bandwidth	Δλ		-	7	-	nm
Half angle	Δθ		-	50	-	deg.
Threshold current	I <sub>th</sub>		0.50	0.75	1.00	A
Aperture size	W*h			85*10		um <sup>2</sup>
Beam divergence parallel to PN junction	θ <sub>  </sub>			11		°
Beam divergence perpendicular to PN junction	θ <sub>⊥</sub>			25		°
Temperature coefficient of wavelength	Δλ/ΔT			0.27		Nm/K

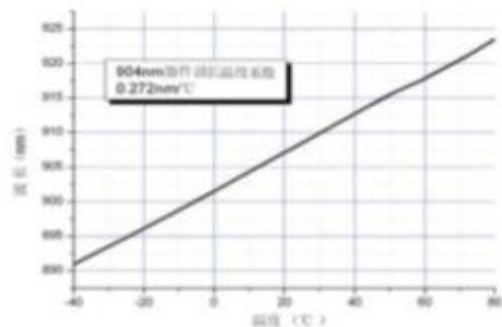
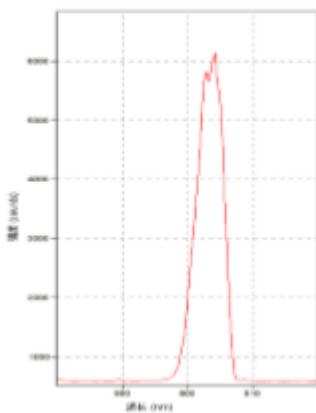
Forward current Vs. Peak power(Ta=25°C)

Forward voltage Vs. Peak power(Ta=25°C)

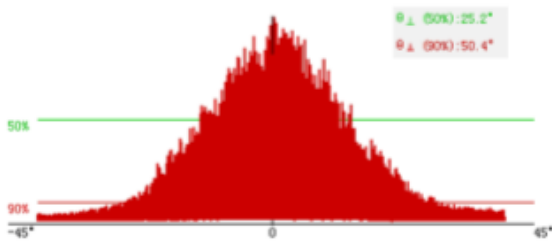


Relative spectral Emission(Ta=25°C, Popt=25W)

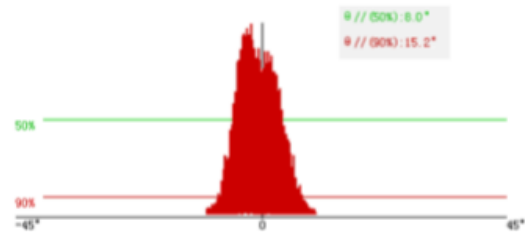
Wavelength Vs. Temperature



Perpendicular emitted angle



Horizontal emitted angle



Near-field spot



Products which incorporate these devices have to follow the safety precautions given in IEC 60825-1 "Safety of laser products"

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