

# 905nm 25W FP MM coaxial pulse laser diode Version:3.1.2 18-06-01

Model: LSPLD905-25W

## Features:

- MQW F-P pulse LD
- Multiple mode
- Low threshold/operate current
- Metal can type non-hermetic
- High reliable

## Applications:

- laser range finding,
- laser radar
- laser guard
- Industrial automatic control
- Science analysis and experiment
- Test and Measurement Equipment



## Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-40~+70	°C
Storage temperature	Tstg	-40~+85	°C
Laser diode forward current	I <sub>f</sub>	22	A
Laser diode Reverse voltage	V <sub>r</sub>	3	V
Soldering temperature/time		260/10	°C/S

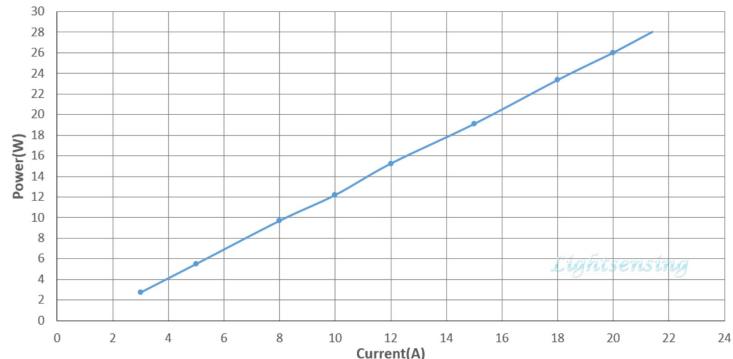
## Electrical and optical characteristics:(T=25°C)

parameter	symbol	Min.	Typ.	Max.	unit
Center wavelength	λ	895	905	915	nm
Threshold Current	I <sub>th</sub>		0.75	1	A
Operating Current	I <sub>op</sub>		18	20	A
Operating Voltage	V <sub>op</sub>		15	17	V
Spectral width	Δλ		7		nm
Light output power(from 200um MM fiber)	P <sub>o</sub> (pulse)		25		W
Rise time	t <sub>r</sub> /t <sub>f</sub>		1		ns
Pulse width	t <sub>p</sub>			100	ns
Duty cycle				0.05	%
Temperature coefficient of wavelength			0.27		nm/°C
Temperature coefficient of optical power			-0.4		%/°C
package	non-hermetic TO-5 Can with fiber coupling				

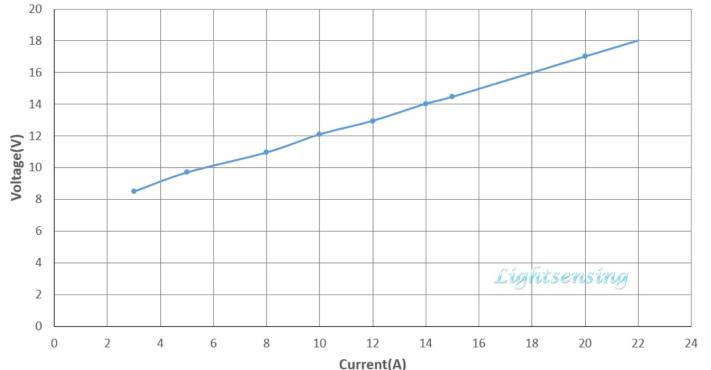
NOTICE: The above product specifications are subject to change without notice.

## The typical curve

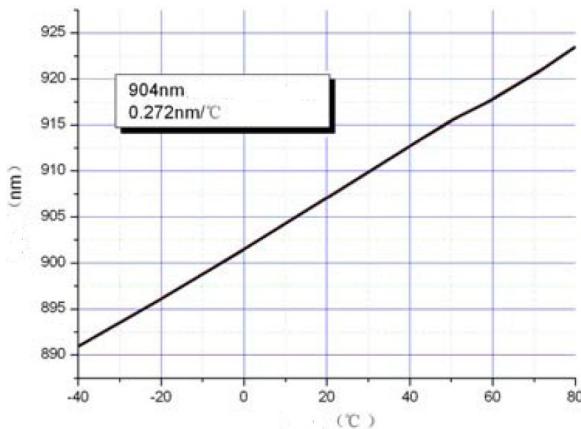
Optical output power  $P_{opt}$  andvs. forward current  $I/F$  ( $TA = 25^\circ C$ )



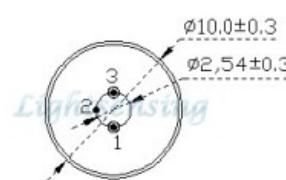
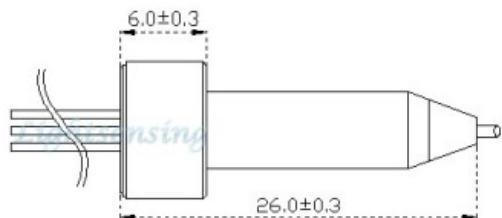
Forward voltage  $V_F$  vs. forward current  $I/F$  ( $TA = 25^\circ C$ )



Wavelength vs temperature ( $TA = 25^\circ C$ )



## The package Dimensions and PIN description



Bottom View

pin	function
1	LD Anode
2	Case
3	LD cathode

## Order information

LSPLD905-X-X

- X=25W      X=10MMFP      105um (NA0.22) MM grade index Fiber coupling with FC/PC connector
- X=other      X=10MMFA      105um (NA0.22) MM grade index Fiber coupling with FC/APC connector
- X=Other      By customer's request

## The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protection is required in storage, transportation and using
- 3: The fiber bending radius no less than 20mm for avoiding fiber damaged ,Be sure the fiber coupling facet is clean before connecting it to opto-circuit.