

# 905nm 10W FP MM coaxial pulse laser diode

Version: 3.1 17-06-01

Model: LSPLD905-10W

## 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>	15	A
Laser diode Reverse voltage	V <sub>r</sub>	3	V
Soldering temperature/time		260/10	°C/S

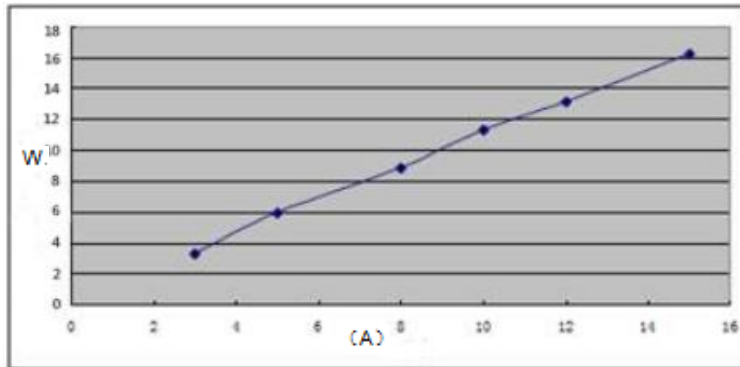
## Electrical and optical characteristics:(T=25°C)

parameter	symbol	Min.	Typ.	Max.	unit
Center wavelength	$\lambda$	895	905	915	nm
Threshold Current	I <sub>th</sub>		0.75	1	A
Operating Current	I <sub>op</sub>		10	13	A
Operating Voltage	V <sub>op</sub>		14	16	V
Spectral width	$\Delta\lambda$		7		nm
Light output power(from 62.5um MM fiber)	Po(pulse)		10		W
Rise time	t <sub>r</sub> /t <sub>f</sub>		1		ns
Pulse width	t <sub>p</sub>			100	ns
Duty cycle				0.1	%
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				

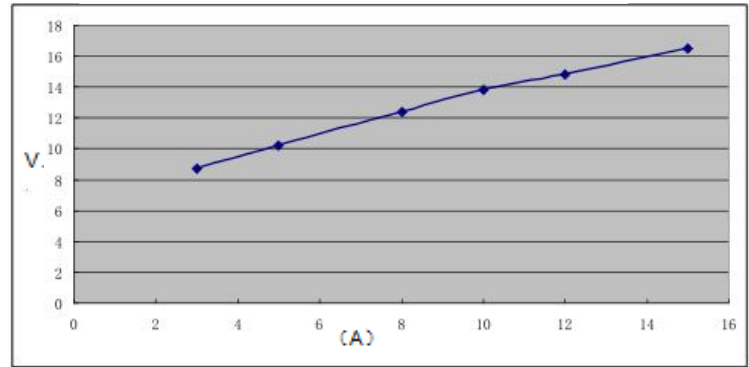
NOTE: The above product specifications are subject to change without notice.

## The typical curve

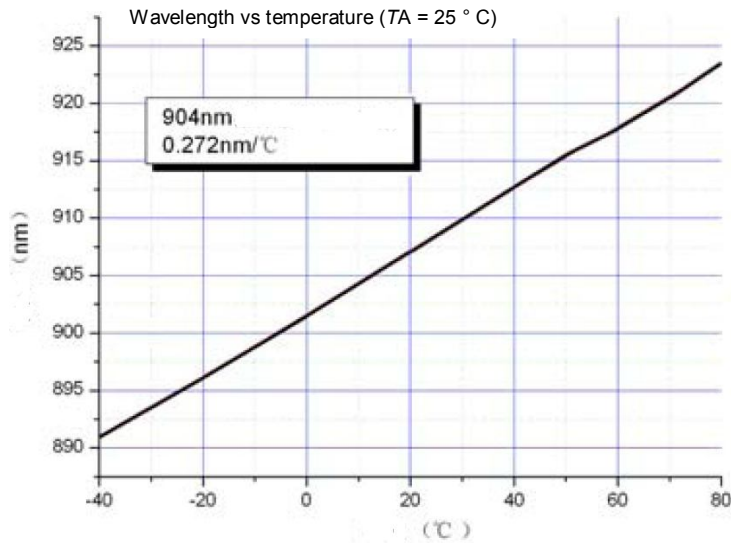
Optical output power  $P_{opt}$  andvs. forward current  $I_F$  ( $T_A = 25^\circ\text{C}$ )



Forward voltage  $V_F$  vs. forward current  $I_F$  ( $T_A = 25^\circ\text{C}$ )



Wavelength vs temperature ( $T_A = 25^\circ\text{C}$ )



## The package Dimensions and PIN description



Bottom View

pin	function
1	LD Anode
2	Case
3	LD cathode

## Order information

LSPLD905-X-X

X=10W  
X=other

X=6MMFP  
X=6MMFA  
X=Other

62.5um (NA0.27) MM Fiber coupling with FC/PC connector  
62.5um (NA0.27) MM Fiber coupling with FC/APC connector  
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.