

905nm 50W FP MM coaxial pulse laser diode

Version: 3.1 17-06-01

Model: LSPLD905-50W

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 _f	40	A
Laser diode Reverse voltage	V _r	3	V
Soldering temperature/time		260/10	°C/S

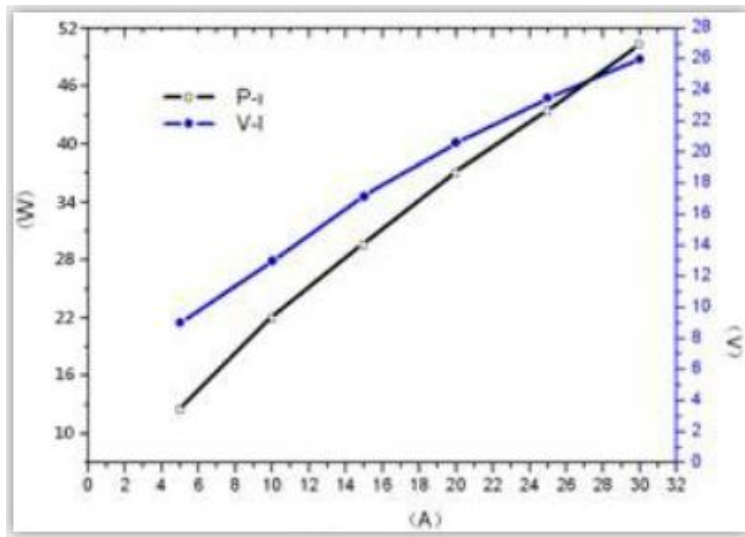
Electrical and optical characteristics:(T=25°C)

parameter	symbol	Min.	Typ.	Max.	unit
Center wavelength	λ	895	905	915	nm
Threshold Current	I _{th}		0.75	1	A
Operating Current	I _{op}		27	30	A
Operating Voltage	V _{op}		24	26	V
Spectral width	$\Delta\lambda$		7		nm
Light output power(from 200um MM fiber)	Po(pulse)		50		W
Rise time	t _r /t _f		1		ns
Pulse width	t _p			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				

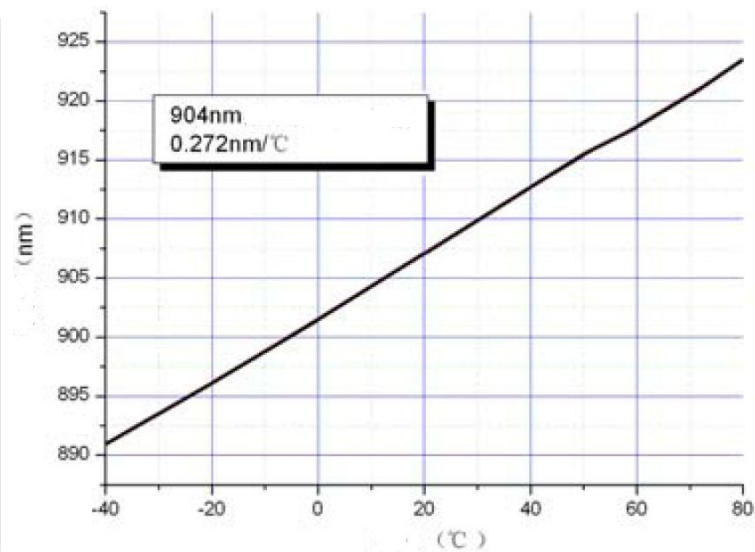
NOTICE: The above product specifications are subject to change without notice.

The typical curve

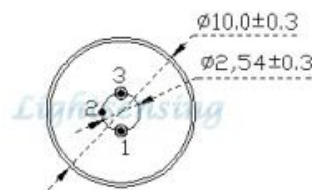
Optical output power P_{opt} , Forward voltage V_F vs.
forward current I_F ($T_A = 25^\circ\text{C}$)



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=50W

X=other

X=20MMFP

X=20MMFA

X=Other

200um (NA0.22) MM Fiber coupling with FC/PC connector

200um (NA0.22) 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.