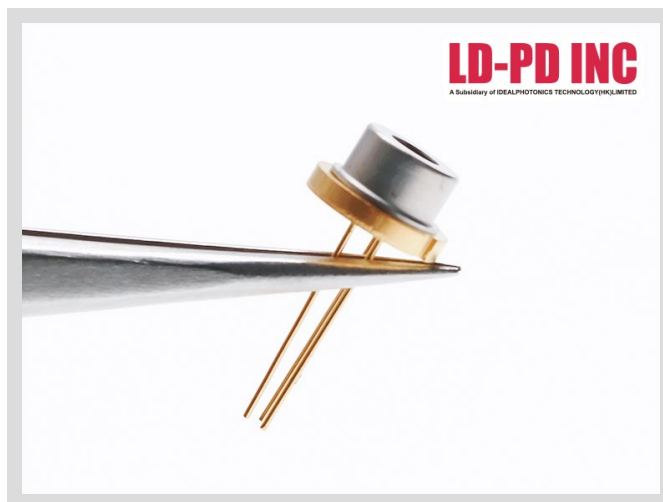


830nm TO9 High Power laser diode(1W)



Description:

The LP-FP-1-A81-W0830-TO9 830nm TO9 High Power laser diode made by LD-PD is a cost effective, highly coherent laser source. High power single emitter TO, output power range from 1W to 1.2W, high efficiency, long lifetime, widely used in Laser illumination, medical and other fields.

Features:

- High Power
- High Reliability
- High Power Conversion Efficiency

Optional:

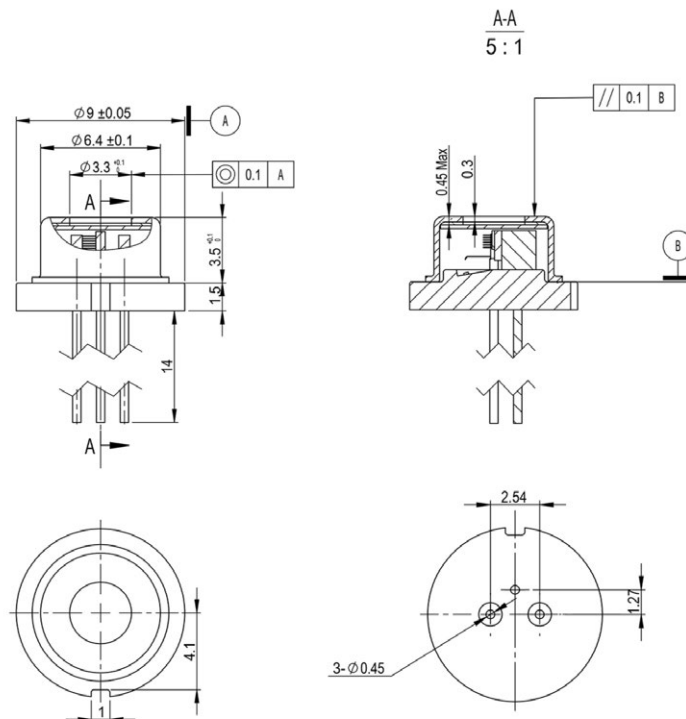
- Medical
- Industry Pump

Electrical/Optical Characteristics:

Tsub=25°C, CW bias unless stated otherwise

TO Serial		PN#LP-FP-1-A81-W0830-TO9		
Parameter	Unit	Min	Typ	Max
Optical2				
Center Wavelength	nm	820	830	840
Wavelength Tolerance	nm		±10	
Output Power4	W		1	
Spectral Width (FWHM)	nm		3.5	4.5
Wavelength Temperature Coefficient	nm/°C		0.28	
Electrical2				
Power Conversion Efficiency	%	55	60	
Slope Efficiency	W/A	0.98	1.05	1.15
Threshold Current	A		1.3	1.6
Operating Current	A		15.5	16.5
Operating Voltage	V		1.6	1.7
Heart Characteristics				
Operating Temperature3	°C	15	25	35
Storage Temperature3	°C		0~55	
Note				
1. Explanation of Item Number: LP(LD-PD In Short)-TO9(TO9 Package)-1.0(Output Power is 1W)-0830(Center Wavelength is 830nm)- 10(Wavelength Tolerance is ±10nm)				
2. Above Data Test at 25°C, Unless otherwise stated.				
3. Please avoid operation and storage in the condensation enviroment. If exceed operating temperature, the device lifetime will be inpacted.				
4. Lifetime reduced if exceed nominal output power.				

Package Size and pin definition:



ABSOLUTE MAXIMUM RATINGS:

Item	Unit	Min	Typ	Max
Case Temperature	°C	-5	25	70
Chip Temperature	°C	+10	25	40
Operating Current	A	0	15	16.5
Forward Voltage	V	0.8	1.2	1.8

Ordering Info:

LP-FP-☆-A8▽-W□□□□-TO9

☆ : Output Power

A: 1W

B: 2W

▽ : Wavelength Tolerance

1: $\pm 10\text{nm}$

2: $\pm 20\text{nm}$

□ □ □ □ : Wavelength

830:830nm

915:915nm