



LD1064A300D25

1064nm 300mW 50°C CW Laser Diode in ø9mm TO-5 Can Package

Description

The Lasermate LD1064A300D25 is a high power 1064nm, 300mW laser diode in a ø9.0mm, TO-can package and with operating temperature of 50°C. The laser diode is suitable as laser light source for many applications.

Features

- 1064nm Infrared laser diode
- Optical output power: 300mW CW
- Operating temperature: +50°C
- Efficient Quantum Well Structure
- Built-in monitor photodiode
- Package: TO-9 (dia. 9.0mm)

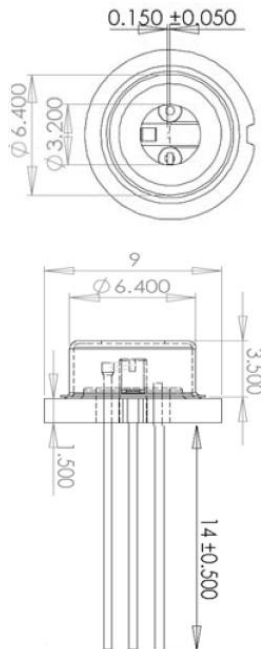
Absolute Maximum Ratings

PARAMETER	SYMBOL	RATING	UNIT
Optical output power	P_O	300	mW
Reverse voltage (LD)	V_{RL}	2	V
Operating temperature	T_{opr}	-20 to +50	°C
Storage temperature	T_{stg}	-40 to +80	°C

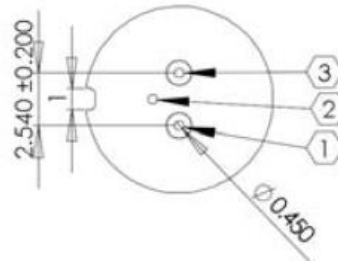
Electrical and Optical Characteristics ($T_c = 25\text{ }^\circ\text{C}$)

PARAMETER	SYMBOL	TYP.	UNIT
Peak wavelength	λ_p	1064±5	nm
Optical output power	P_O	300	mW
Threshold current	I_{th}	≤0.05	A
Operating current	I_{op}	≤0.39	A
Operating voltage	V_{op}	≤1.7	V
Slope efficiency	η	≥0.9	W/A
Parallel divergence angle	$\theta_{//}$	≤8	deg
Perpendicular divergence angle	θ_{\perp}	≤28	deg
Spectrum FWHM		<0.5	nm
Polarization		TE	

Mechanical Outline (unit: mm)



PIN CONFIGURATION



1 LD Cathode (-)

2 LD Anode (+) / PD Cathode (-)

3 PD Anode (+)

Additional Notes

- Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- Take precautions to avoid electrostatic discharge and/or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- Proper heat sinking of the device assures stability and lifetime. Always ensure that maximum operating temperatures are not exceeded.
- Observing visible or invisible laser beams with human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- No laser device should be used in any application or situation where life or property is at risk in the event of device failure.
- Specifications are subject to change without notice. Ensure that you have the latest specification by contacting us prior to purchase or use of the product.