

1064nm 300mW 50°C Laser Diode in TO-5 ϕ 9.0mm Package

Part No. LD1064A300D25

FEATURES

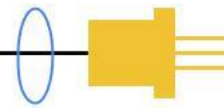
- 1064nm 300mW CW laser diode
- Package: TO-5 (9.0mm)
- Efficient Quantum Well Structure
- Built-in monitor photodiode

ABSOLUTE MAXIMUM RATINGS

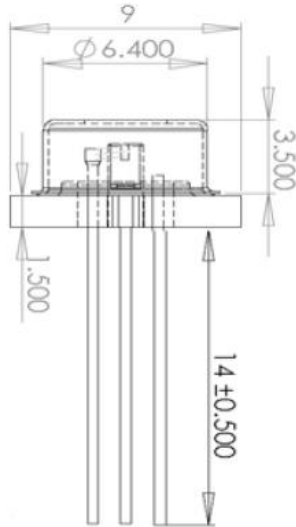
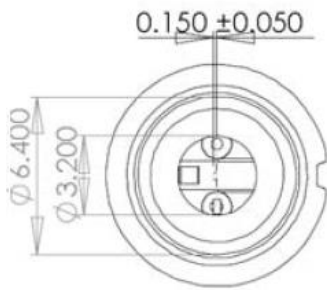
Parameter	Symbol	Rating	Unit
Optical output power	P_O	300	mW
Reverse voltage (LD)	V_{RL}	2	V
Operating temperature	T_{opr}	-20 to +50	°C
Storage temperature	T_{stg}	-40 to +80	°C

ELECTRICAL AND OPTICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$)

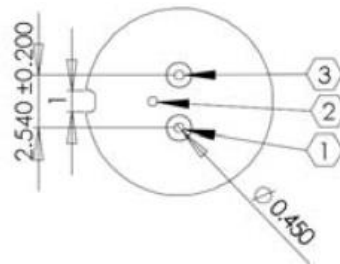
Parameter	Symbol	Typ.	Unit
Peak wavelength	λ_p	1064±5	nm
Optical output power	P_O	300	mW
Threshold current	I_{th}	≤0.05	A
Operating current	I_{op}	≤0.39	A
Operating voltage	V_{op}	≤1.7	V
Slope efficiency	η	≥0.9	W/A
Parallel divergence angle	$\theta_{//}$	≤8	deg
Perpendicular divergence angle	θ_{\perp}	≤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.