



## LD1550A20C25

1550nm 20mW 50°C CW Laser Diode in  $\varnothing$ 5.6mm TO-18 Can Package

## Description

The Lasermate LD1550A20C25 is a 1550nm, 20mW laser diode in a  $\varnothing$ 5.6mm, TO-can package and with operating temperature of 50°C. The laser diode is suitable as laser light source for many applications.

## Features

- 1550nm Infrared laser diode
- Optical output power: 20mW CW
- Operating temperature: +50°C
- Efficient Quantum Well Structure
- Built-in monitor photodiode
- Package: TO-18 (dia. 5.6mm)

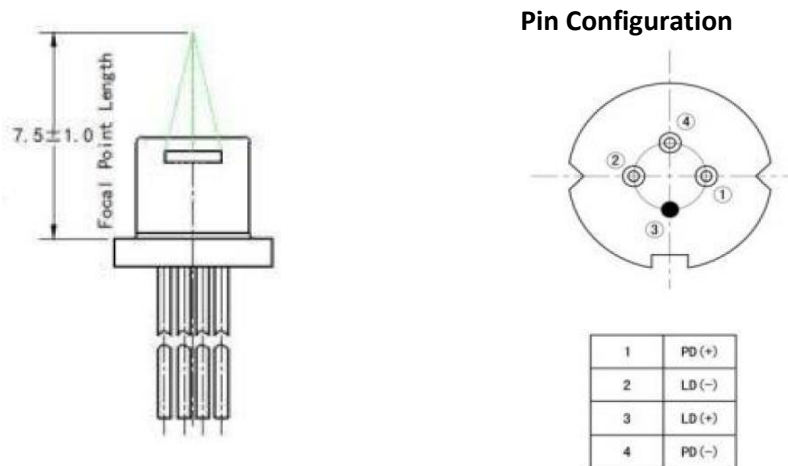
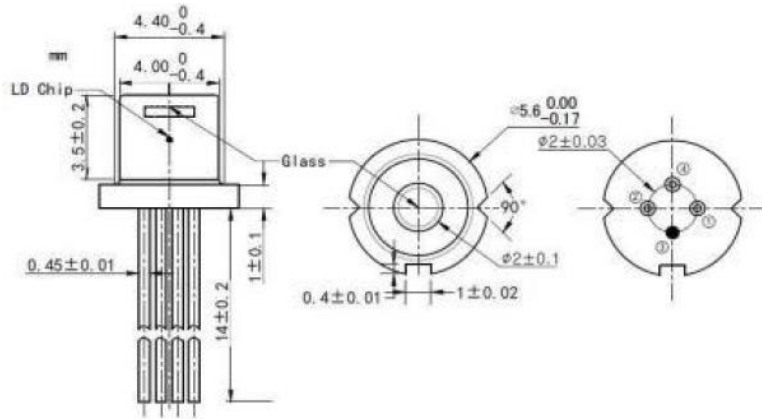
## Absolute Maximum Ratings

PARAMETER	SYMBOL	RATING	UNIT
Optical output power	$P_O$	20	mW
Reverse voltage (LD)	$V_{RL}$	2	V
Operating temperature	$T_{opr}$	-20 to +50	°C
Storage temperature	$T_{stg}$	-40 to +85	°C

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

PARAMETER	SYMBOL	TYP.	UNIT
Peak wavelength	$\lambda_p$	1550±5	nm
Optical output power	$P_O$	20	mW
Threshold current	$I_{th}$	≤0.01	A
Operating current	$I_{op}$	≤0.09	A
Operating voltage	$V_{op}$	≤1.3	V
Slope efficiency	$\eta$	≥0.8	W/A
PD Reverse current	$I_{rp}$	2	mA
PD Reverse voltage	$V_{rp}$	20	V
Parallel divergence angle	$\theta_{//}$	≤9	deg
Perpendicular divergence angle	$\theta_{\perp}$	≤20	deg
Spectrum FWHM		<0.3	nm
Polarization		TE	

Mechanical Outline (unit: mm)



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.