

# LD1310A20C25 1310nm 20mW 50°C CW Laser Diode in Ø5.6mm TO-18 Can Package

### Description

The Lasermate LD1310A20C25 is a 1310nm, 20mW laser diode in a  $\emptyset$ 5.6mm, TO-can package and with wide operating temperature of 50°C. The laser diode is suitable as laser light source for many applications.

#### **Features**

• 1310nm Infrared laser diode

Optical output power: 20mW CWOperating 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	Po	20	mW
Reverse voltage (LD)	$V_{RL}$	2	V
Operating temperature	T <sub>opr</sub>	-20 to +50	°C
Storage temperature	T <sub>stg</sub>	-40 to +85	°C

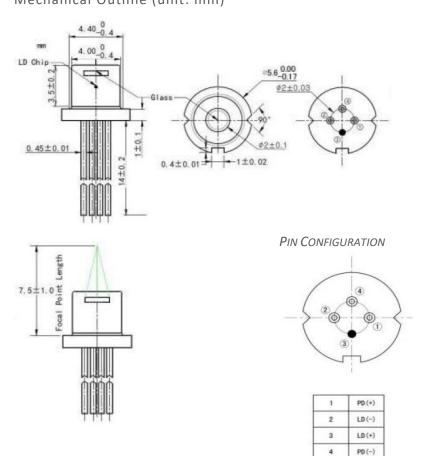
### Electrical and Optical Characteristics (T<sub>C</sub> = 25 °C)

Parameter	Symbol	Typ.	Unit
Peak wavelength	$\lambda_{p}$	1310±5	nm
Optical output power	Po	20	mW
Threshold current	I <sub>th</sub>	≤0.01	А
Operating current	l <sub>op</sub>	≤0.07	А
Operating voltage	V <sub>op</sub>	≤1.3	V
Slope efficiency	η	≥0.8	W/A
PD Reverse current	I <sub>rp</sub>	2	mA
PD Reverse voltage	$V_{rp}$	20	V
Parallel divergence angle	Θ//	≤9	deg
Perpendicular divergence angle	θι	≤20	deg
Spectrum FWHM		<0.3	nm
Polarization		TE	

Rev.01



## 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.