

1550nm 20mW 50°C Laser Diode in TO-18 ϕ 5.6mm Package

Part No. LD1550A20C25

FEATURES

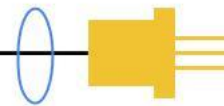
- 1550nm 20mW CW laser diode
- Package: TO-18 (5.6mm)
- Efficient Quantum Well Structure
- Built-in monitor photodiode

ABSOLUTE MAXIMUM RATINGS

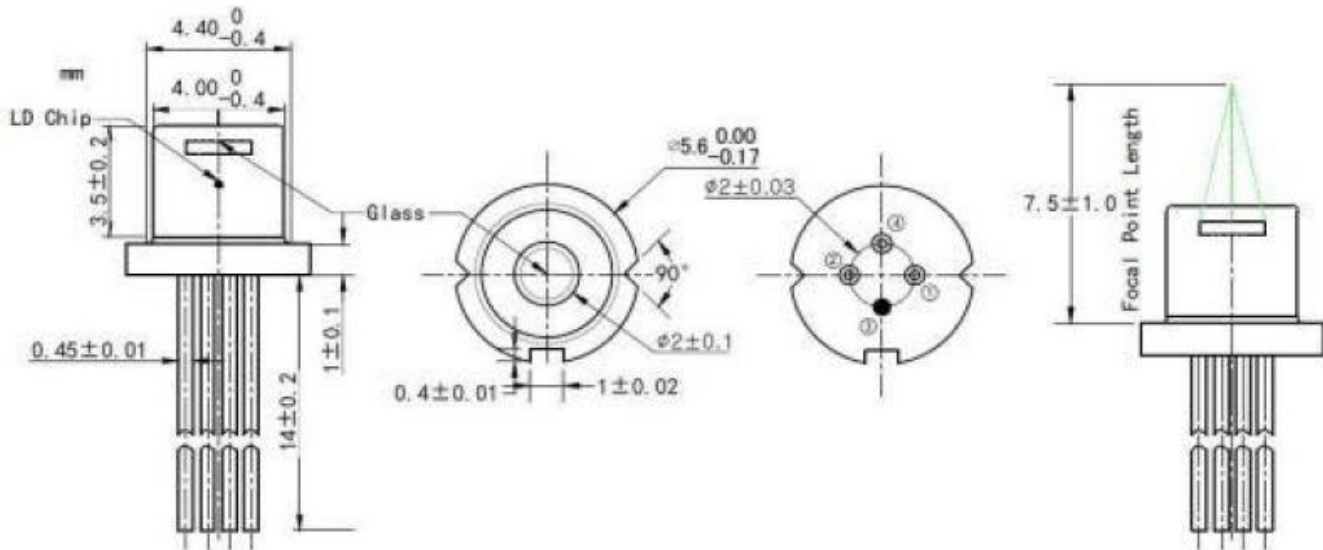
Parameter	Symbol	Rating	Unit
Optical output power	P_O	20	mW
Reverse voltage (LD)	V_{RL}	2	V
Operating temperature	T_{opr}	-20 to +50	°C
Storage temperature	T_{stg}	-40 to +85	°C

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

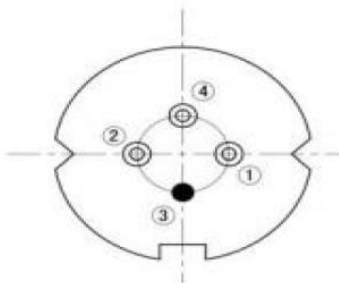
Parameter	Symbol	Typ.	Unit
Peak wavelength	λ_p	1550±5	nm
Optical output power	P_O	20	mW
Threshold current	I_{th}	≤0.01	A
Operating current	I_{op}	≤0.09	A
Operating voltage	V_{op}	≤1.3	V
Slope efficiency	η	≥0.8	W/A
PD Reverse current	I_{rp}	2	mA
PD Reverse voltage	V_{rp}	20	V
Parallel divergence angle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



MECHANICAL OUTLINE (unit: mm)



Pin Configuration



1	PD (+)
2	LD (-)
3	LD (+)
4	PD (-)

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.

Lasermate Group, Inc.

19608 Camino De Rosa, Walnut, CA 91789, USA

Tel: (909)718-0999 | Fax: (909)718-0998 | E-mail: info@lasermate.com | URL: <https://www.lasermate.com>