



LD980A500D15

940nm 500mW 50°C CW Laser Diode in ø9mm TO-9 Can Package

Description

The Lasermate LD980A500D15 is a high power 980nm, 500mW 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

- 980nm Infrared laser diode
- Optical output power: 500mW CW
- Operating temperature: +50°C
- Package: TO-9 (dia. 9.0mm)

Specifications (T_c = 25°C)

OPTICAL CHARACTERISTICS				
PARAMETER	MIN.	TYP.	MAX.	UNIT
Lasing wavelength	970	980	990	nm
Output power	-	500	-	mW
Spectral width	-	1.2	2.5	nm
Emitting area width	-	50	-	um
Temperature coefficient	-	0.30	-	nm/°C
Fast axis divergence	-	34	38	deg
Slow axis divergence	-	7	10	deg

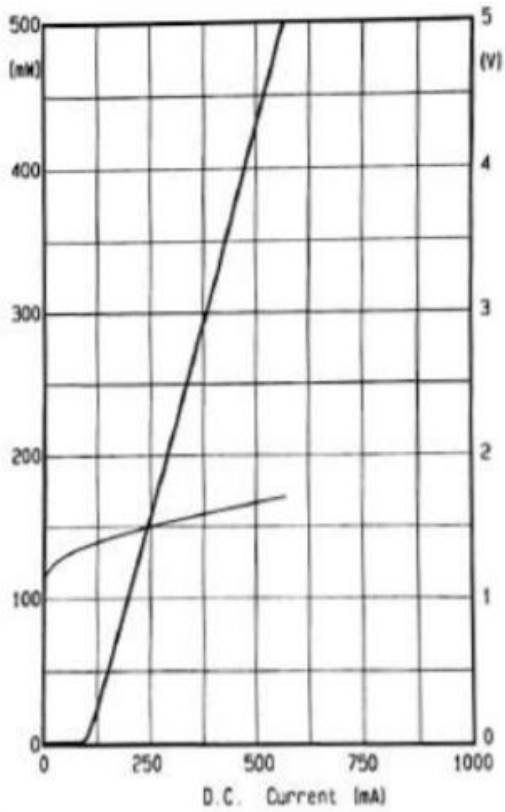
ELECTRICAL CHARACTERISTICS				
PARAMETER	MIN.	TYP.	MAX.	UNIT
Slope efficiency	0.9	-	-	W/A
Threshold current	-	0.11	0.15	A
Operating current	-	0.59	0.70	A
Operating voltage	-	1.65	2.00	V

OTHERS CHARACTERISTICS				
PARAMETER	MIN.	TYP.	MAX.	UNIT
Package	TO-9			-
Operating temperature	10	-	50	°C
Storage temperature	-10	-	60	°C

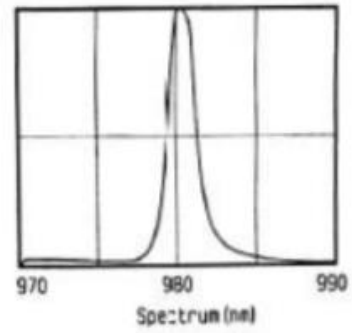


Typical Characteristics

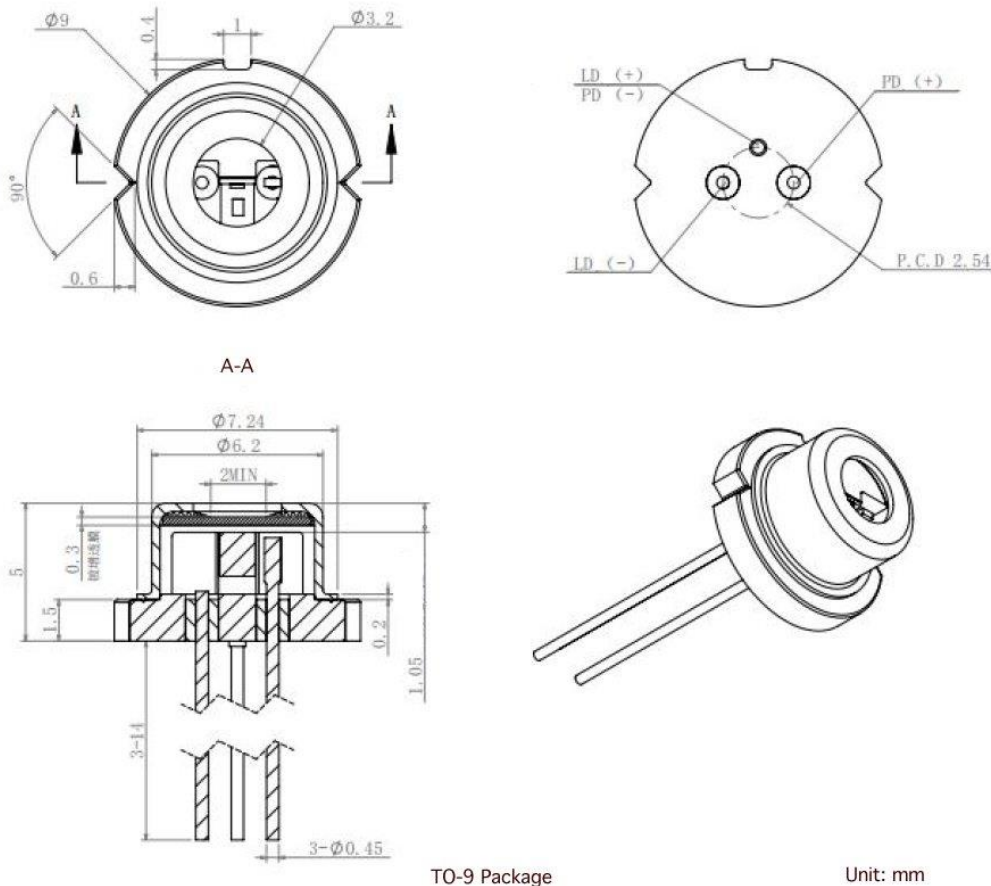
P-I-V CURVE



SPECTRAL CURVE



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.