



LD980A1WD15

940nm 1000mW 50°C CW Laser Diode in ø9mm TO-5 Can Package

Description

The Lasermate LD980A1WD15 is a high power 980nm, 1000mW Fabry-Perot laser diode in a ø9.0mm, TO-can package and 50°C operation. The laser diode is suitable as laser light source for many applications.

Features

- 980nm Fabry-Perot cavity semiconductor laser
- Optical output power: 1000mW CW
- Operating temperature: +50°C
- High output power
- Package: TO-9 (dia. 9.0mm)

Specifications (T_C = 20°C)

| OPTICAL CHARACTERISTICS | | | | |
|-------------------------|------|------|------|-------|
| PARAMETER | MIN. | TYP. | MAX. | UNIT |
| Lasing wavelength | 970 | 980 | 990 | nm |
| Output power | - | 1 | - | W |
| Spectral width | - | 1.0 | 2.0 | nm |
| Emitting area width | - | 100 | - | um |
| Temperature coefficient | - | 0.30 | - | nm/°C |
| Fast axis divergence | - | 34 | 38 | deg |
| Slow axis divergence | - | 7 | 10 | deg |

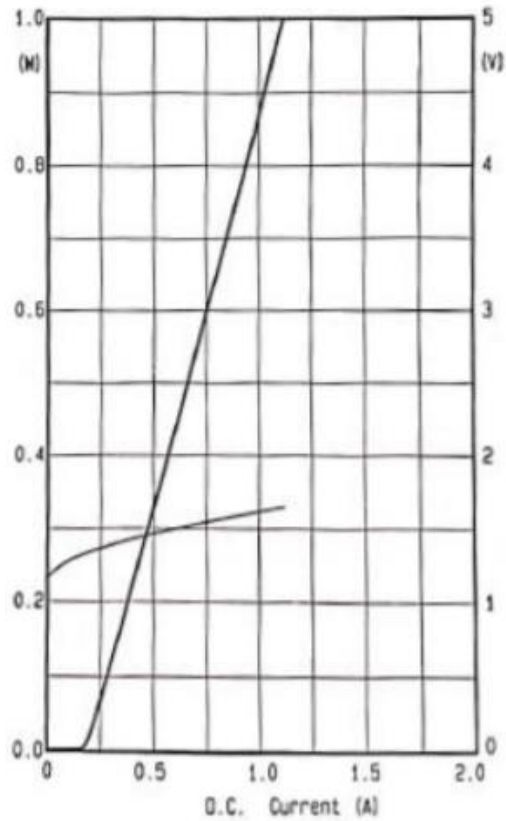
| ELECTRICAL CHARACTERISTICS | | | | |
|----------------------------|------|------|------|------|
| PARAMETER | MIN. | TYP. | MAX. | UNIT |
| Slope efficiency | 0.9 | - | - | W/A |
| Threshold current | - | 0.20 | 0.25 | A |
| Operating current | - | 1.15 | 1.30 | A |
| Operating voltage | - | 1.65 | 2.00 | V |

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

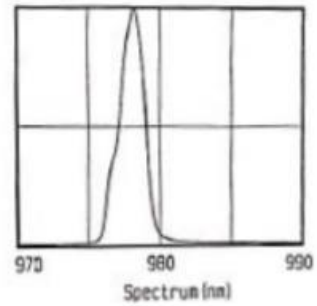


Typical Characteristics

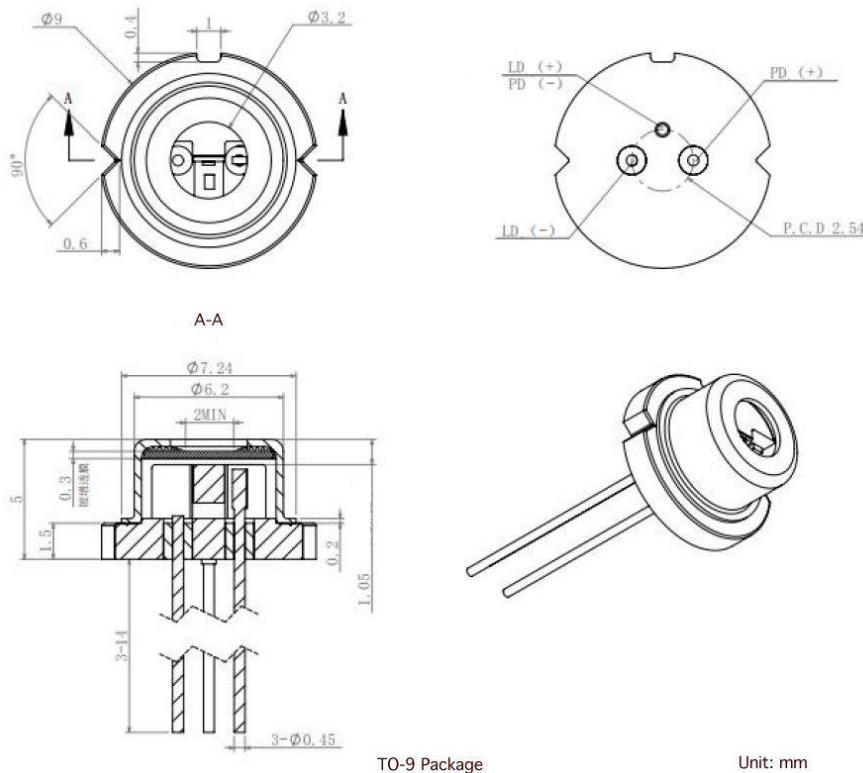
P-I-V CURVE



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.