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# LDBxxxQxWC
# QCW Conduction-Cooled Single Laser Diode Bar (808nm)

## Description

The LDBxxxQxWC 808nm conduction-cooled, high power laser diode bar offers up to 100 Watts QCW. With its scalable power, the diode laser packaged bar can be used in a pumping, industrial and medical applications that require high-peak power. The compact package can be configured for enhanced brightness through stacking, scaled linearly or vertically for optimized light and material integration.

## Features

- 808nm Conduction-Cooled Packaged Diode Laser Bar
- High output power: Up to 100W QCW
- High brightness
- Modular and compact design for ease of integration
- Packaged 10mm laser diode bar

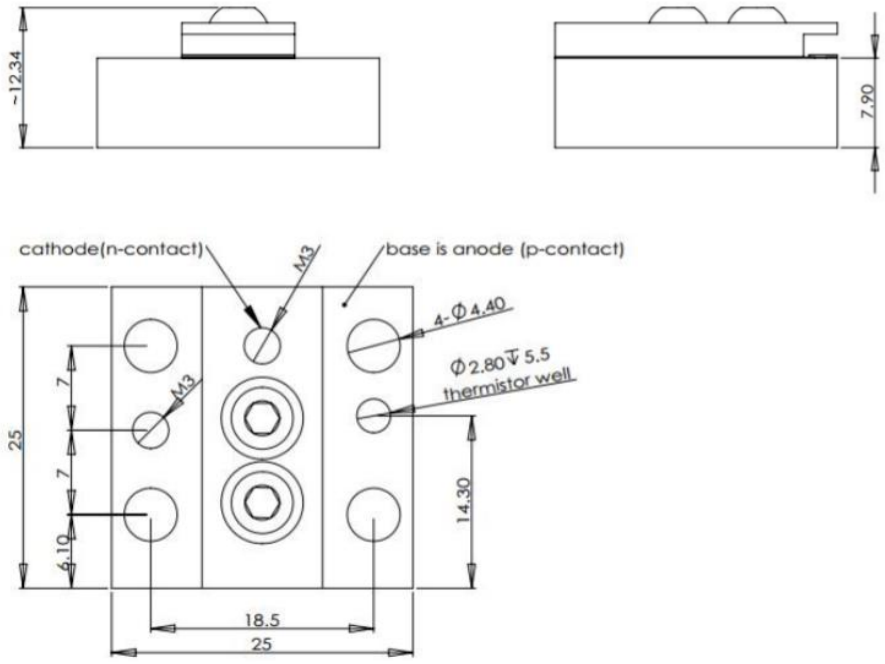
## Applications

- Pumping
- Industrial
- Medical
- Printing
- Scientific research

## Specifications ($T_C$ = 20°C)

| Part Number | LDB808Q100WC | LDB808Q200WC | LDB808Q300WC |
|---|---|---|---|
| **Optical Characteristics** | | | |
| Center wavelength ($\lambda_c$) | 808 nm | 808 nm | 808 nm |
| Operation mode | QCW | QCW | QCW |
| Output power ($P_o$) | 100 W | 200 W | 300 W |
| Spectral width ($\Delta\lambda$) | <5 nm | <5 nm | <5 nm |
| Wavelength Temperature coefficient | 0.28 nm/°C | 0.28 nm/°C | 0.28 nm/°C |
| Fast axis divergence ($\theta_\perp$) | <39 deg | <39 deg | <39 deg |
| Slow axis divergence ($\theta_\parallel$) | <10 deg | <10 deg | <10 deg |
| **Electrical Characteristics** | | | |
| Threshold current ($I_{th}$) | <25 A | <30 A | <30 A |
| Operating current ($I_{op}$) | ≤110 A | ≤200 A | ≤300 A |
| Operating voltage ($V_{op}$) | <2.0 V | <2.0 V | <2.0 V |
| **Thermal Characteristics** | | | |
| Operating temperature ($T_{op}$) | 15 to 35 °C | 15 to 35 °C | 15 to 35 °C |
| Storage temperature ($T_{stg}$) | -10 to +60 °C | -10 to +60 °C | -10 to +60 °C |

## Mechanical Outline (unit: mm)




## Notes

1. 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.
2. Please make sure that the laser diode is operated under the temperature between 15 °C and 35 °C, as high temperature will increase threshold current, decrease exchange rate and accelerate the aging.
3. Please take measures to avoid condensation, which will cause aging of laser diode.
4. Take precautions to avoid electrostatic discharge and/or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
5. Observing visible or invisible laser beams with human eye directly, or indirectly, can cause permanent damage. Do not look directly into the laser output port.