



RLDB808-150-3

- **Compact Infrared Laser Diode Module**
- **808 nm, 150 mW**
- **Focusable**
- **Glass Lens**



Description

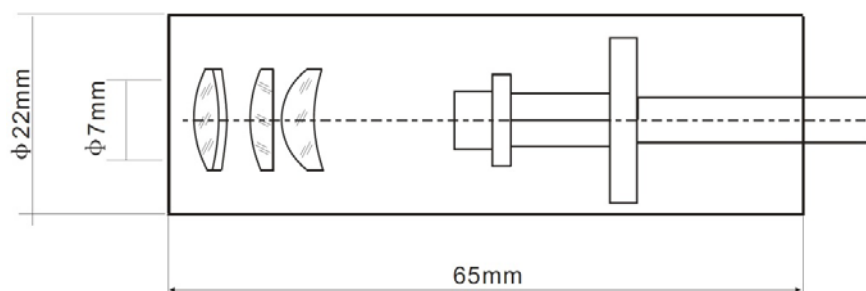
RLDB808 series of Laser diode modules has been designed with emphasis on **superior beam quality**, high power stability, and **reliable operation**. The modules body is made of black anodized aluminum, enclosing laser diode, collimator lens, and driving electronics. RLDB808 features a **focusable glass lens optic** with a locking mechanism (grub screw), and a **3 VDC driver** circuit.

Specifications

Parameter	Value
Wavelength	808 nm
Output Power	150 mW
Operating Mode	CW
Laser Class	3B
Beam Profile	
Output Aperture	Ø7 mm
Beam Divergence	0.3 mrad
Focus	adjustable
Operating Distance	10 m
Operating Voltage	3 VDC
Operating Current	≤450 mA
Operating Temperature	-10°C ..+40°C
Storage Temperature	-40°C ..+80°C
Material Body	Aluminum, black anodized
Material Lens	Glass, both sides AR coated
Dimensions	Ø 22 mm x 65 mm
Leads (26AWG PVC free)	Ø 0.25 mm ² x 100 mm
MTTF	≥8000 h

Note: The above specifications are for reference purpose only and subjected to change without prior notice.

Drawing





Electrical Connection

Lead	Description
Red	+ 3 VDC
Black	GND

Precaution for Use

1. Safety of Laser light

- **WARNING: Laser is emitting invisible light!**
- DO NOT look directly into the emitting area of the laser during operation!
- Laser Light can damage the human eyes and skin. Do not expose the eye or skin directly to any laser light and/or through optical lens. When handling the laser module, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.



2. Static Electricity

- Static electricity or electrical surges will reduce and degrade the reliability of the laser module. So it is recommended that a wrist band and/or an anti-electrostatic glove be used when handling the product.
- All devices, equipment and machinery must be grounded properly. It is recommended that precautions should be taken against surge voltage to the equipment that mounts the laser module.



3. Absolute Maximum Rating

- Active layer of LDs shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the laser module must be operated strictly below absolute maximum rating.



NOTE
LASER MODULE
MUST BE COOLED