

Pulsed Single Emitter

Lumispot Tech OEM Single Emitter Laser Diode Solution

www.lumispot-tech.com



808nm Pulsed Single Emitter

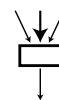
- ① High-efficiency heat conduction and dissipation
- ② Superior thermal stability
- ③ High reliability
- ④ High stability
- ⑤ Compact structure
- ⑥ Easy to install and use



Illumination



Detection



Pumping



OEM

1550nm Pulsed Single Emitter

- ① Eye-safe wavelength
- ② Small size, lightweight
- ③ High electro-optical conversion efficiency
- ④ Adaptable to harsh working conditions



Rangefinding



LiDAR



Telecommunications



OEM

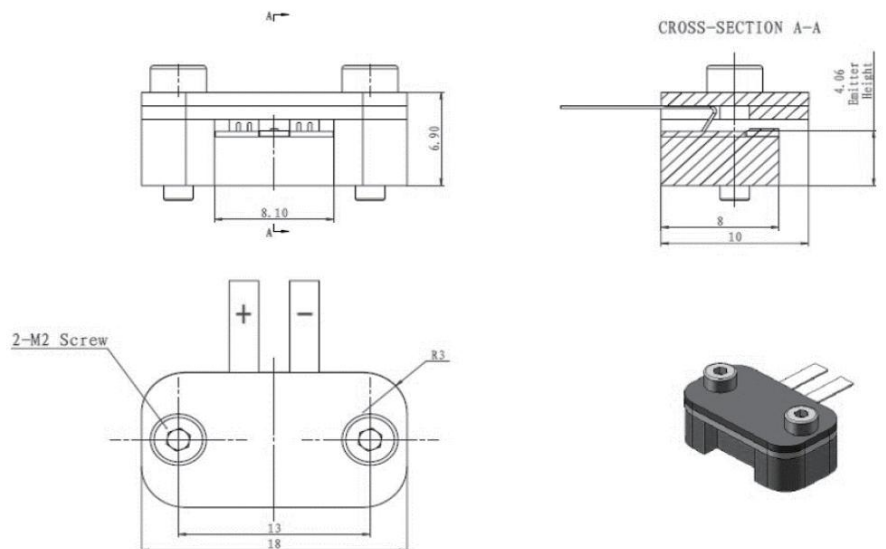
808nm Pulsed Single Emitter

Technical Datasheet of 5W/8W/10W Single Emitter



| | LMC-808C-C5-H | LMC-808C-C8-H | LMC-808C-C10-H | Unit |
|------------------------------------|---------------------------------|---------------|----------------|-------|
| Continuous Output Power | 5 | 8 | 10 | W |
| Center Wavelength | 808 | | | nm |
| Spectral Width | ≤3 | | | nm |
| Wavelength Tuning Range | ~0.27 | | | nm |
| Wavelength Temperature Coefficient | ±3(Typical Value) | | | nm/°C |
| Emission Area Width | 200 | 200 | 380 | um |
| Fast Axis Divergence Angle (FWHM) | ~35 | | | ° |
| Slow Axis Divergence Angle (FWHM) | ~10 | | | ° |
| Beam Shaping | Supports fast axis compression. | | | |
| Threshold Current | 0.7 | 1 | 1.1 | A |
| Operating Current | 5 | 8 | 10 | A |
| Operating Voltage | 1.8 | | | V |
| Energy Conversion Efficiency | >5 | | | % |
| Operating Temperature | 20~30 | | | °C |
| Storage Temperature | -30~80 | | | °C |
| Dimensions | 18*10*6.9 | | | mm |

* Note: All table parameters are measured at a heat sink temperature of 25°C.



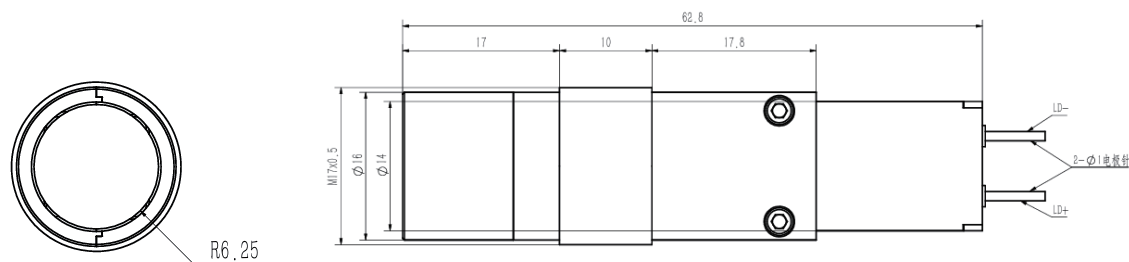
1550nm Pulsed Single Emitter

Technical Datasheet



| LMC-1550-PXX-mr | Value | | Unit |
|-----------------------|----------------------|----|------|
| Wavelength | 1550±20 | | nm |
| Pulse width (FWHM) | 200-500 (Adjustable) | | ns |
| Pulse energy | 5 | 10 | uJ |
| Repetition rate | ≤ 5 | | kHz |
| Peak power | 15 | 30 | W |
| Energy stability | ≤ 5 | | % |
| Beam divergence angle | ≤ 4 (Adjustable) | | mrad |
| Operating voltage | < 16 | | V |
| Operating current | 30 | 50 | A |
| Operating temperature | -40 - 60 | | °C |
| Storage temperature | -50 - 70 | | °C |
| Lifetime | 20000 | | h |
| Weight | < 20 | | g |

*Parameters can be customized as demand.



NOTE

1. Anti-static measures must be taken during transport, storage, and use. During transportation and storage, connect a shorting wire between the pins for protection.
2. Before use, ensure that the fiber end face is clean.
3. Use a constant current power supply; avoid peak currents and surges during operation.
4. When the laser is operating, avoid direct exposure of the eyes or skin to the laser.
5. The laser should be used at the rated current and power.
6. Ensure good heat dissipation when the laser is working; it is recommended to use high thermal conductivity silicone grease on the heat-conducting surface.
7. For water cooling, the temperature is recommended to be between 23 and 25 degrees Celsius.
8. Do not bend the fiber at sharp angles; the bending radius should be greater than 300 times the diameter of the fiber.

Company Profile

About Lumispot



We're
Lumispot Tech

¥ 78million
Register Capital

6+
Ph.D

80%
Proportion of Talent

150+
Patents



Lumispot Technology Group was established in 2010, located in Wuxi with registered capital of CNY 78.55 million, and production area of about 25,000 square meters and more than 500 employees. Through more than 14 years of efforts and development, Lumispot has become a leader in special laser information technology domain with a strong technical foundation.

Our expertise focusses on laser technology research & development, offering a wide range of products including laser diode, erbium laser, fiber lasers, solid-state lasers, and its system, such as laser rangefinder modules, LiDAR lasers, structured lasers, illumination systems, FOG components, dazzlers, etc. which are widely applied for defense & security, LiDAR system, remote sensing, inertial navigation, technical research, etc.

Our company is rewarded as National High-tech Enterprise and National Innovation enterprise, and more than 150 patent have been obtained.

Contact

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**Illuminate Future
From Laser**

We aim to become the global leader
in laser special information domain.

