

# 405nm Laser Diode

## ■ Features

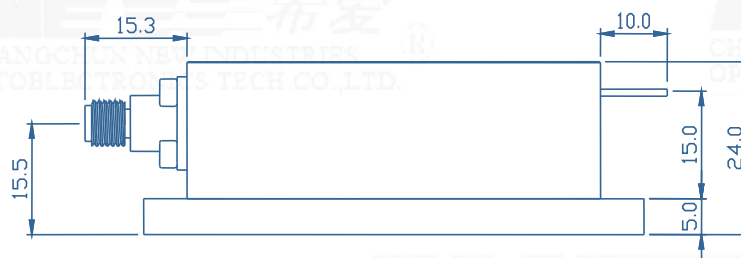
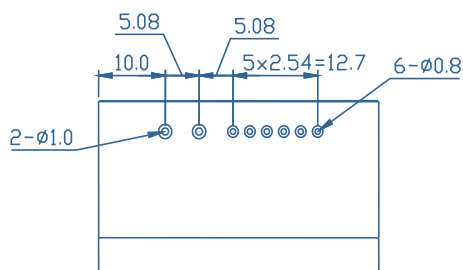
- ◆ High output power of 10W
- ◆ 200μm/0.22NA multimode optical fiber
- ◆ Center wavelength 405±10nm

## ■ Applications

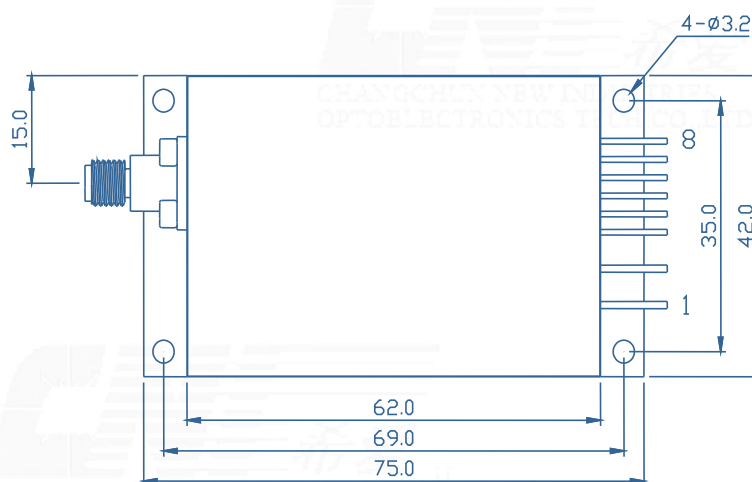
- ◆ Medical Application
- ◆ Scientific Research



## Outline Dimension (mm)



| Pin-out Assignment |            |
|--------------------|------------|
| Pi                 | Function   |
| 1                  | LD (+)     |
| 2                  | LD (-)     |
| 3                  | -          |
| 4                  | -          |
| 5                  | -          |
| 6                  | Thermistor |
| 7                  | Thermistor |
| 8                  | -          |



## Typical Device Performance (25°C)

|                             | Min | Typical | Max | Unit  |
|-----------------------------|-----|---------|-----|-------|
| <b>Optical</b>              |     |         |     |       |
| CW Output Power             | -   | 10      | -   | W     |
| Center Wavelength           | -   | 405±10  | -   | nm    |
| <b>Electrical</b>           |     |         |     |       |
| Threshold Current           | -   | 0.46    | -   | A     |
| Operating Current           | -   | 1.65    | -   | A     |
| Operating Voltage           | -   | 17.2    | -   | V     |
| Slope Efficiency            | -   | 8.4     | -   | W / A |
| Power Conversion Efficiency | -   | 35      | -   | %     |
| <b>Fiber*</b>               |     |         |     |       |
| Fiber Core Diameter         | -   | 200     | -   | μm    |
| Fiber Cladding Diameter     | -   | 220     | -   | μm    |
| Numerical Aperture          | -   | 0.22    | -   | m     |
| Fiber Length                | -   | 1-5     | -   | m     |
| Fiber Connector             | -   | -       | -   | -     |

\* Customized fiber and connector available.

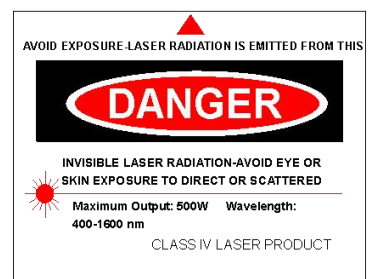
## Absolute Ratings

|                                       | Min | Max                  | Unit |
|---------------------------------------|-----|----------------------|------|
| Operating Temperature                 | 15  | 35                   | °C   |
| Operating Relative Humidity           | -   | 75                   | %    |
| Cooling Mode                          | -   | Water cooling (25°C) | -    |
| Storage Temperature                   | -20 | 80                   | °C   |
| Storage Relative Humidity             | -   | 90                   | %    |
| Lead Soldering Temperature (10 s max) | -   | 250                  | °C   |

\* Measuring specifications.

All figures in this specification are measured by CNI's method and may contain measurement deviations.

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



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