

## LMF-915C-C510-C24-B Specification Manual

### Product Description

The product is a fiber coupled output diode laser, which is used as a pump source. It has the advantages of compact structure, small size, light weight, high power density, high electro-optical efficiency, stable performance and long life. Suitable for industrial processing, pumping, photoelectric detection, etc., is an important part of the system.



### Main Feature

- High environmental adaptability
- High efficiency conduction heat dissipation
- Long life
- Compact structure and light weight

### Main Application

- Fiber laser pumping
- Direct semiconductor
- Laser lighting
- Solid state laser pump source

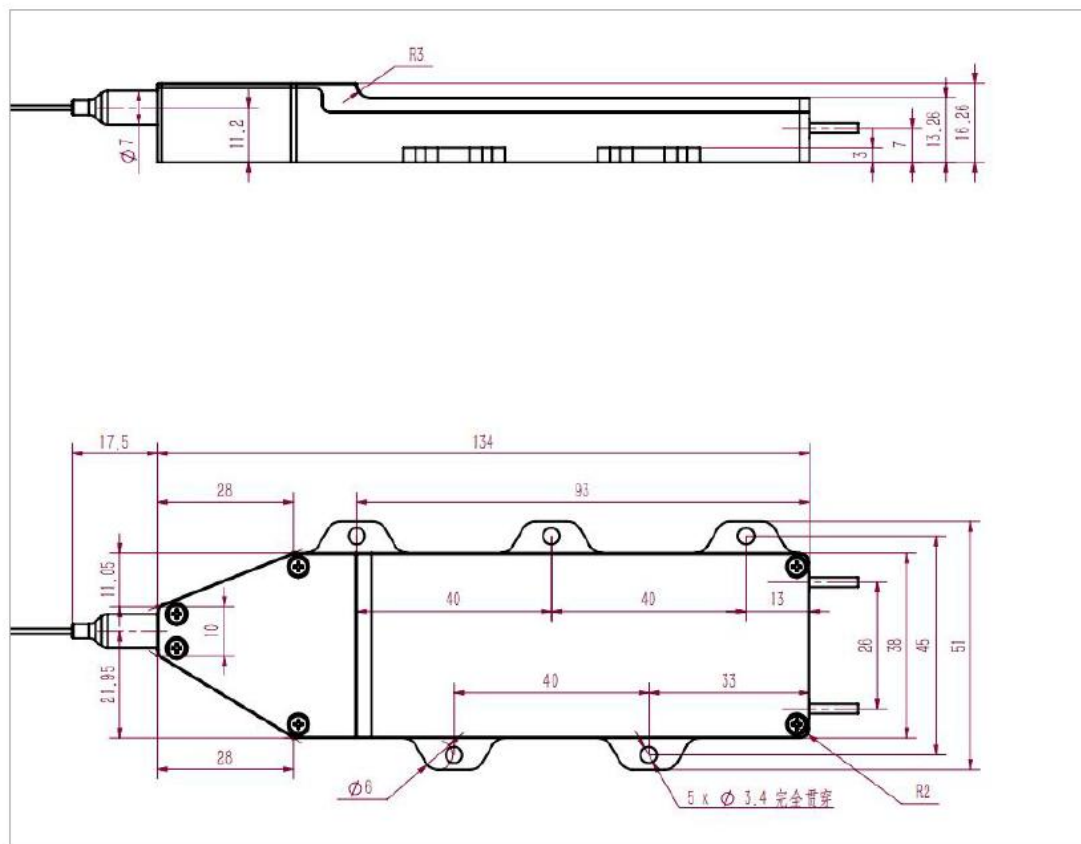
### Technical Parameter @25°C (Water cooling)

| Optical Parameters            | Units | Minimum | Typical   | Maximum |
|-------------------------------|-------|---------|-----------|---------|
| Output Power                  | W     | 510     |           |         |
| Central Wavelength            | nm    | 912     | 915       | 918     |
| Spectra Width                 | nm    |         |           | 5       |
| 95% power NA                  | NA    |         | 0.2       |         |
| Temperature drift coefficient | nm/°C |         |           | 0.4     |
| Echo isolation                | nm    |         | 1030-1200 |         |

| Electric Parameters        | Units | Minimum | Typical | Maximum |
|----------------------------|-------|---------|---------|---------|
| Electro-optical efficiency | %     | 48      |         |         |
| Working Current            | A     |         | 27      | 28      |

|                             |       |         |                       |            |
|-----------------------------|-------|---------|-----------------------|------------|
| Working Voltage             | V     |         | 38                    | 40         |
| Fiber Parameters            | Units | Minimum | Typical               | Maximum    |
| Fiber core diameter         | μm    |         | 220                   |            |
| Fiber NA                    |       |         | 0.22                  |            |
| Fiber Cladding Diameter     | μm    |         | 242                   |            |
| Fiber Length                | m     |         | 1.5                   | Customized |
| Fiber Optic Sheath Diameter | mm    |         | 0.9                   | Customized |
| Terminal                    |       |         | SMA905/Pigtail output |            |

## Layout Drawing



## Notification

- During transportation, storage, and use, anti-static measures must be taken, and short-circuit wires should be connected between the pins during transportation and storage.
- Before use, ensure the fiber optic end-face is clean.
- Use a constant current power supply and avoid peak currents and surges during operation.
- When the laser is in operation, avoid direct exposure of eyes or skin to the laser.
- The device should be used within its rated current and power.
- Ensure good heat dissipation when the laser is working; it is recommended to use high thermal conductivity silicone grease on the heat-conducting surface.
- For water cooling, a temperature range of 23–25 degrees Celsius is recommended.
- Do not bend the fiber optic cable at sharp angles; the bending radius should be greater than 300 times the diameter of the fiber.