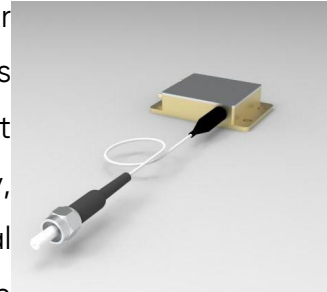


## LMF-915D-C30-F105-C3A-A1001 Specification Manual

### Product Description

The product is a fiber coupled output semiconductor laser diode, which is used as a laser pump source. It has the advantages of compact structure, small size, light weight, high power density, high electro-optical efficiency, stable performance and long lifetime. Applied in industrial processing, pumping, optoelectronic detection etc., which is an important component of laser systems.



### Main Application

- Fiber-coupling laser pump source
- Direct semiconductor applications
- Laser illumination

### Main Features

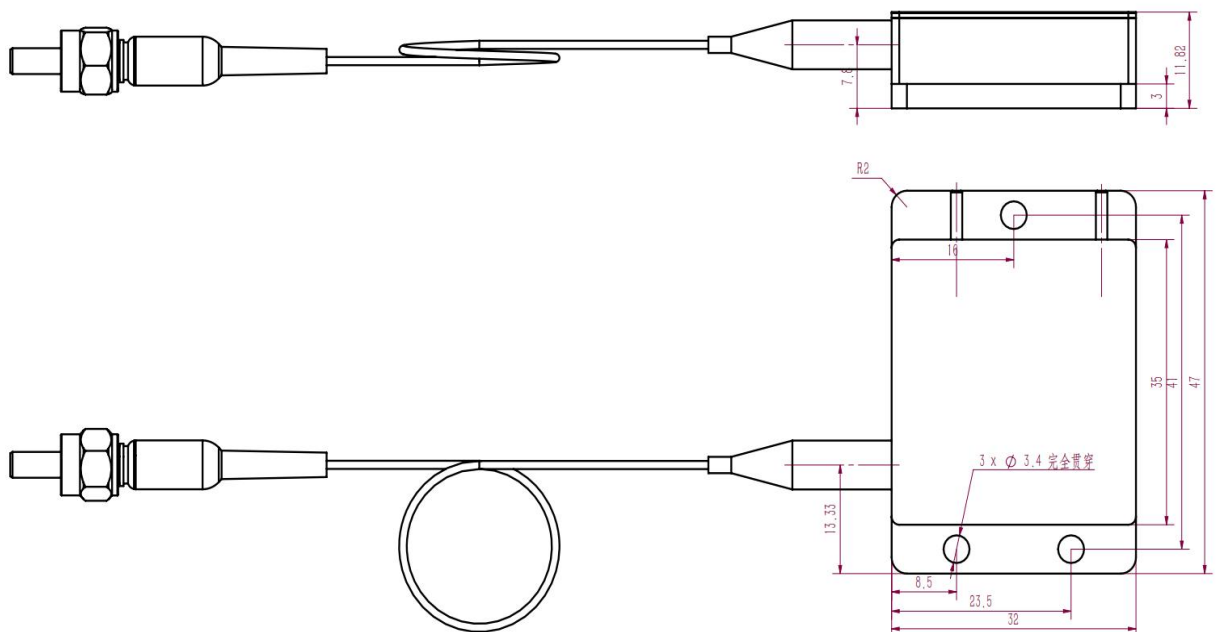
- High environmental adaptability
- High-efficiency conductive cooling
- Long lifetime
- Compact structure and light weight

### Technical Parameter @25°C

| Optical Parameters             | Units | Minimum | Typical | Maximum   |
|--------------------------------|-------|---------|---------|-----------|
| Output Power                   | W     | 30      |         |           |
| Central Wavelength             | nm    | 910     | 915     | 920       |
| Spectrum Width (FWHM)          | nm    |         |         | 5         |
| 95% Power NA Value             | NA    |         | 0.15    |           |
| Temperature drift coefficient  | nm/°C |         |         | 0.4       |
| Optical return isolation range | nm    |         |         | 1030-1200 |
| Electric Parameters            | Units | Minimum | Typical | Maximum   |

| Electro-optical Efficiency  | %     | 45                            |         |            |
|-----------------------------|-------|-------------------------------|---------|------------|
| Working Current             | A     |                               | 12      | 13         |
| Working Voltage             | V     |                               | 5.5     | 6          |
| Fiber Parameters            | Units | Minimum                       | Typical | Maximum    |
| Fiber core diameter         | μm    |                               | 105     |            |
| NA                          |       |                               | 0.22    |            |
| Fiber Cladding Diameter     | μm    |                               | 125     |            |
| Fiber Length                | m     | 1.5                           |         | Customized |
| Fiber Optic Sheath Diameter | mm    |                               | 0.9     | Customized |
| Output Fiber Connector      |       | Fiber tail/SMA905/FC optional |         |            |

## Layout Drawing



## Attentions

- 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 °C 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.