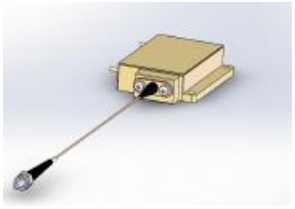
LMF-915D-C50-F105-C6B Specification Manual

Product Description



The product is a fiber coupled output semicounductor 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
- Solid state laser pump source
- Direct semiconductor applications
- Laser illumination

Main Features

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

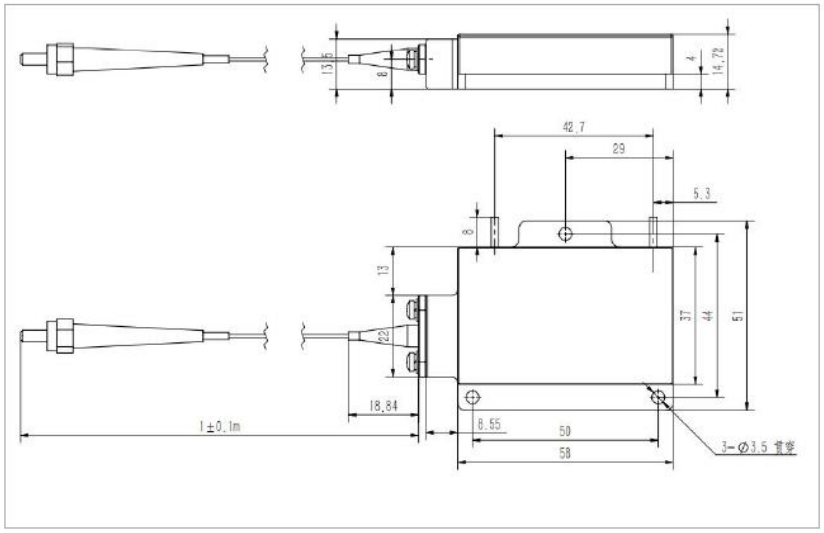
Technical Parameter @25℃

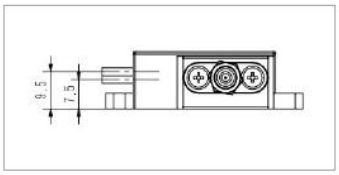
Optical Parameters	Units	Minimum	Typical	Maximum
Output Power	W	50		
Central Wavelength	nm	910	915	920
Spectrum Width (FWHM)	nm			5
95% Power NA Value	NA		0.17	0.18
Temperature drift coefficien	nm/℃		0.3	0.4
Optical return isolation range	nm		1030-1200	

Electric Parameters	Units	Minimum	Typical	Maximum
Electro-optical Efficiency	%	45		
Working Current	A		10	11
Working Voltage	V		11	12

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 ℃ 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.