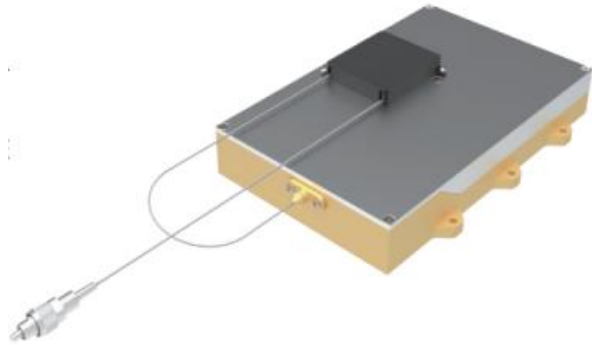


LMF-525D-C4-F50-C4-A3001 Specification List

Product Description

The product is a fiber coupled output semiconductor laser diode, which is used as a laser source. It has the advantages of compact structure, small size, light weight, high power density, high electro-optical efficiency stable performance and long life. Applied in fluorescence excitation, spectral analysis, photoelectric detection, and laser display etc., which is an important component of laser systems.



Main Application

- Illumination
- Detection
- Scientific research

Main Features

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

Technical Parameter @25°C

Optical Parameters	Units	Minimum	Typical	Maximum
Output Power	W	4		
Central Wavelength	nm		525 ± 5	
Spectrum Width (FWHM)	nm		8	
95% Power NA Value	NA		0.2	
Uniformity			90% (with lens)	

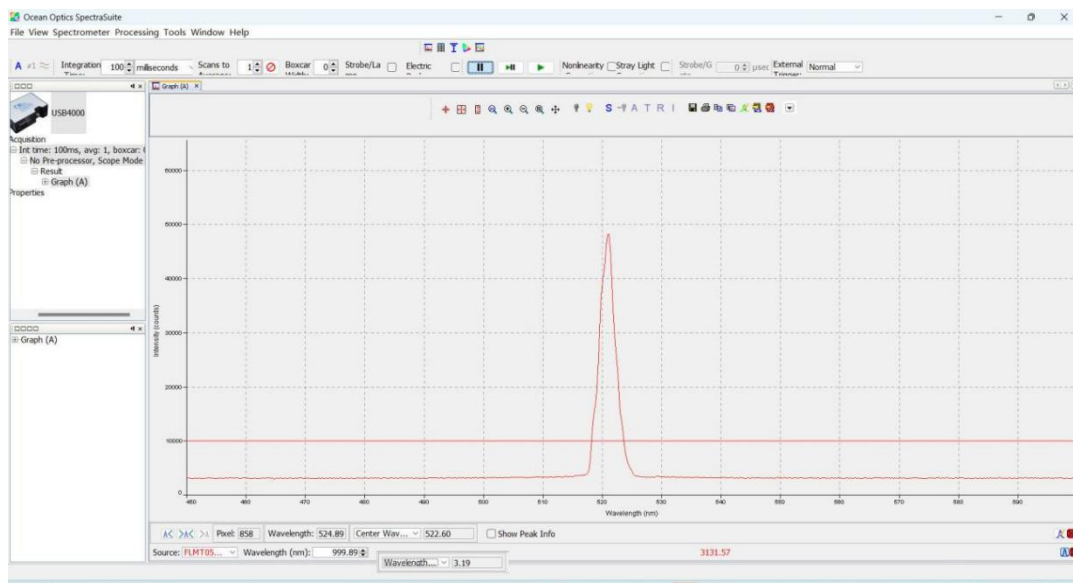
Electric Parameters	Units	Minimum	Typical	Maximum
Electro-optical Efficiency	%	12.5		
Working Current	A			2
Working Voltage	V			DC21V

Fiber Parameters	Units	Minimum	Typical	Maximum
Fiber core diameter	μm		50	
Fiber Cladding Diameter	μm		125	
Fiber NA			0.22	
Fiber Length	m		1±0.1	Customized
Fiber Sheath Diameter	mm		0.9	Customized
Fiber Connector			FC/SMA905 optional	

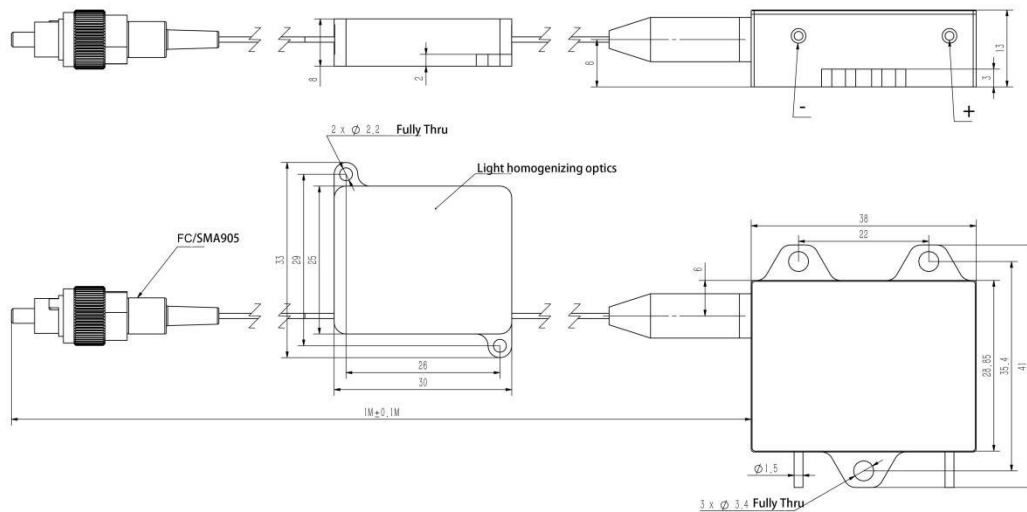
Other Parameters	Typical
High and low temperature storage	First store at +70 °C for 1 hour, then store at -50 °C for 1 hour, cycle three times, with a heating and cooling rate of 3 °C/min

Structure Parameters	Units	Minimum	Typical	Maximum
Dimension	mm		41×38×13	
Weight	g		75	
Platform			C4	

Spectral Chart



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.