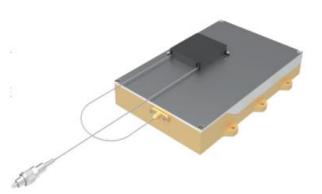


# LMF-525D-C15-F105 Specification List

## **Product Description**

The product is a fiber-coupled output semiconductor 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.

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 lifespan
- Compact structure and lightweight

### **Technical Parameter @25°C**

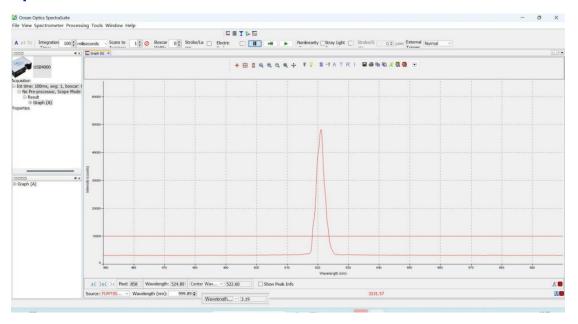
Optical Parameters	Units	Minimum	Typical	Maximum
Output Power	W	15		
Central Wavelength	nm		525±5	
Spectrum width (FWHM)	nm		10	
95% energy NA	NA		0.21	
homogenization			85% (with lens)	
Electric Parameters	Units	Minimum	Typical	Maximum
Electro-optical efficiency	%	10		
Working Current	Α			2
Working Voltage	V		66V-82V	



(2 channels, each 33V-41V, can be connected in series)

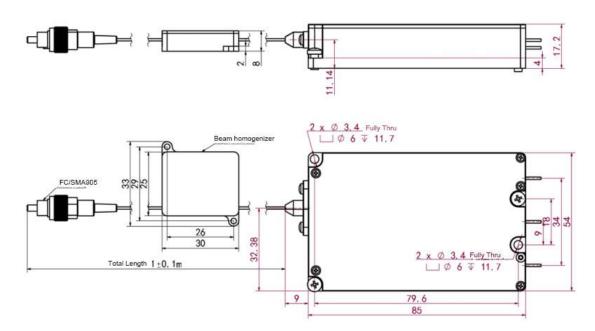
Fiber Parameters	Units	Minimum	Typical	Maximum	
Fiber core diameter	μm		105		
Fiber Cladding Diameter	μm		125		
Fiber NA			0.22		
Fiber Length	m		1±0.1	Customized	
Fiber Sheath Diameter	mm		0.9	Customized	
Fiber Connector	FC/SMA905 optional				
Other Parameters	Typical				
High and low	First store at+70 $^{\circ}{\mathbb C}$ for 1 hour, then store at -50 $^{\circ}{\mathbb C}$ for 1 hour,				
temperature storage	cycle three times, with a heating and cooling rate of 3 $^{\circ}\mathrm{C/min}$				
Structure Parameters	Units	Minimum	Typical	Maximum	
Dimension	mm		85×54×17.2		
Weight	g		370		
Platform			B16		

# **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 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.