

High Power Fiber Coupled Diode Laser LM Series (With Pilot Beam)



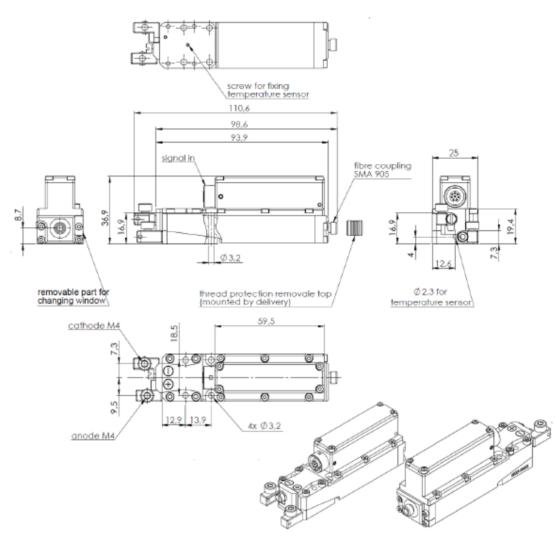
Features

- High brightness
- High E/O efficiency
- Compact housing
- Hermetically sealed housing
- Conduction Cooling
- Plug and play fiber connector

Applications

- Advanced Manufacturing
- Health
- Information Technology
- Scientific Research

Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.



Product Specifications

FCS000013 ²	FCS000015	FCS000014		Product Code
FL-LM2045-40-980-400	FL-LM2048-50-980-200	FL-LM2047-25-808-200		Part No. ¹
Value	Value	Value	Unit	Optical Data
40	50	25	W	CW-nominal output power
980	980	808	nm	Centroid wavelength
10	10	10	nm	Wavelength tolerance (±)
5	5	5	nm	Spectral width (FWHM)
~0.34	~0.34	~0.28	nm/°C	Wavelength Temp. drift
	1	1		Wavelength stabilization
				Operation Conditions
25	25	25	°C	Nominal diode heat sink Temp.
+15 +30	+15 +30	+15 +30	°C	Diode heat sink operation Temp. ³
90	100	60	W	Minimum heat sink capacity
				Electrical Data
55	70	40	А	Max. operation current start of life
66	84	48	А	Max. operation current end of life
8	8	10	А	Typical threshold current
2	2	2	V	Typical operation voltage
0.9	0.8	0.9	W/A	Typical slope
44	43	39	%	Typical E/O efficiency
				Fiber connection
	1	1		Fiber included
400	200	200	μm	Fiber core diameter
0.22	0.22	0.22		Numerical aperture
SMA905	SMA905	SMA905		Fiber optic connector
				Package
110.6×25×36.9	110.6×25×36.9	110.6×25×36.9	mm³	Dimensions
0.35	0.35	0.35	kg	Weight basic package
-20 +60	-20 +60	-20 +60	°C	Storage Temp.
				Additional Features
NTC & Pt100	NTC & Pt100	NTC & Pt100		Temp. sensors
Output signal: 02.5V	Output signal: 02.5V	Output signal: 02.5V		Monitor diode (driver: 5V)
0.7mW, 650±20nm	0.7mW, 650±20nm	0.7mW, 650±20nm		Pilot beam (driver: 3.3V, 25mA)
12V, ≤100mA	12V, ≤100mA	12V, ≤100mA		Fiber detection sensor (PNP)
Yes	Yes	Yes		Accessories package ⁴
				Measurement
non AR coated, 400µm	non AR coated, 200µm	non AR coated, 200µm		Fiber
25	25	25	°C	Diode heat sink Temp.

¹ Part No. = Brand Code - Series - Power - Centroid Wavelength - Fiber Core Diameter.

² Typical customization of products.

³ Operation beyond recommended temperature may cause lifetime reduction or even damage to the product.

⁴ In the accessory package, the positive and negative electrodes of the "diode" need to be reversely connected to the negative and positive electrodes of the module; The insulation and thermal conductivity of the "carbon film" are very important to the installation and use of the laser, as the housing of the laser is connected to its anode.



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