



1064nm Infrared Dot DPSS Laser Modules, TTL Modulation up to 1kHz, ACC Circuit Design

GMF1064 Series



Overview

The Lasermate GMF1064 series laser modules are 1064nm infrared diode-pumped solid-state laser modules in rectangular package at <200mW output power. The laser module features Automatic Current Control (ACC) circuit design and PCB driver in box with switch.

Features

- 1064nm infrared DPSS laser module
- Automatic Current Control (ACC) circuit design
- Low cost
- Fixed focus
- Output power stability 5%

Applications

- Pointing
- Leveling
- Sensing

Product Overview

The following table shows the list of available part numbers, wavelength, optical output power, laser class, operating current, and linear polarization for GMF1064 series laser modules.

Part Number	Wavelength (nm)	Output power (mW)	Operating Current (A)	Linear Polarization
GMF1064-200FBC1	1064	<200	<0.75	4:1
GMF1064-200FBC2	1064	<200	<0.75	100:1

Specifications of GMF1064 Series 1064nm Infrared DPSS Laser Modules

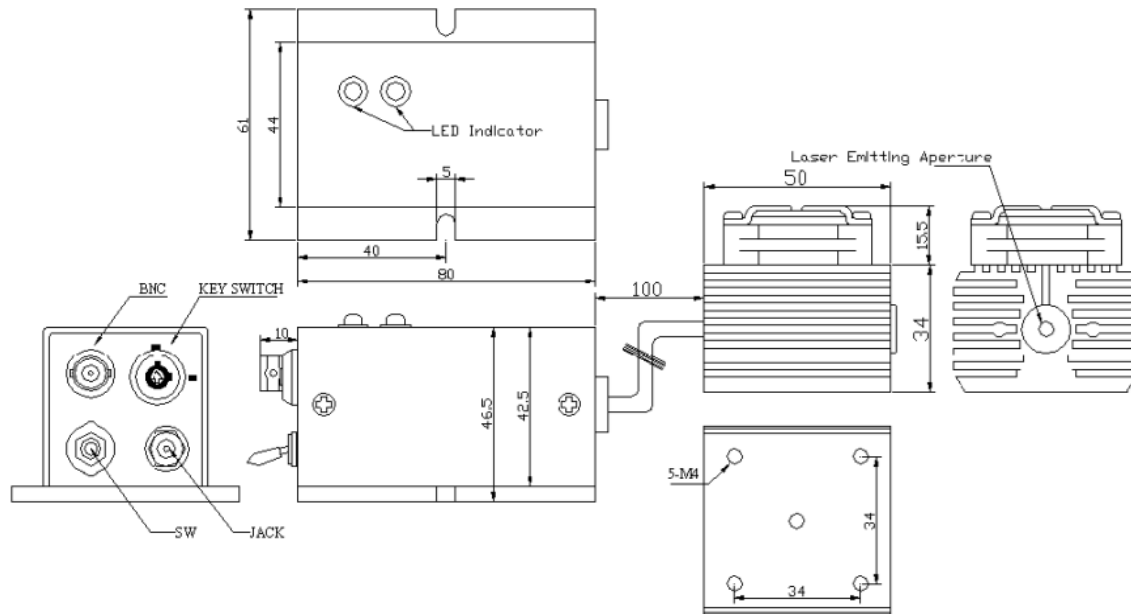
Model Number	GMF1064-200FBCZ
Wavelength	1064nm
Mode	TEM ₀₀
Output Power (mW) @ 25 °C	<200mW (~180mW)
Operating Current (A)	<0.75
PCB Driver	PCB driver in box with switch
Focus	Fixed
Circuit Design	ACC
Operation Mode	CW with TTL capable and up to 1KHz
M ²	< 2
Linewidth	< 0.1 nm
Linear Polarization	Standard 4:1 (Z=1); Optional 100:1 (Z=2)
Beam Divergence	<1.4 mrad
Beam Diameter	< 2 mm at aperture
Stability	<±5% @ 1hr, 25 ± 3 °C
Cooling Fan	Yes, automatic cooling fan included
AC Adapter	9V Included
Connector	DC-Jack for CW & BNC for TTL
Storage Temperature	10 to 40 °C
Optimum Operating Temperature	15 to 35 °C
MTTF	>3,000 hrs
Dimensions (LxWxH)	See the Dimensions outline below

Notes:

1. Additional heat sink or cooling fan may be needed to stabilize the output power of laser module.
2. MTTF (Mean Time to Failure) is based on the MTTF rating of high power 808nm laser diode used from the laser diode manufacturer.

Mechanical Outline (unit: mm)

Subassembly PCB in Box with Switch



Additional Notes

- The GMF1064 series diode pumped solid stated infrared laser modules, which use laser diode pumped Nd:YVO₄ crystal coupled with KTP as a frequency doubler, are designated solely as OEM components for incorporation into the customer's end products. Therefore, it is the customer's responsibility to comply with FDA requirements of FDA 21CFR, section 1040.10 and 1040.11 for complete laser products. For the code of FDA regulations, please refer to [FDA Performance Standards for Light-Emitting Products](#) for detailed information.
- Specifications are subject to change without notice.



Lasermate Group, Inc.
 19608 Camino De Rosa
 Walnut, CA 91789 USA
 Tel: (909)718-0999
 Fax: (909)718-0998
sales@lasermate.com
www.lasermate.com