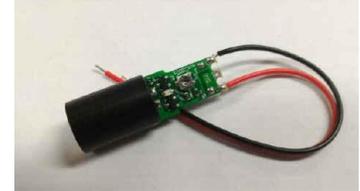




GMP515 Series – 515nm Green Laser Diode Modules

12mm Diameter, APC Circuit, 3-5V DC



Overview

The Lasermate GMP515 series laser modules are 515nm green diode laser modules with Automatic Power Control (APC) circuit design and compact dimensions of 12mm diameter. Designed for stable output with low power fluctuation, they operate on 3-5V DC and are ideal for applications including pointing, leveling, and sensing.

Features

- 515nm green laser diode module
- Automatic Power Control (APC) circuit design
- Compact size
- Power output stability 5%
- Circular beam profile

Applications

- Pointing
- Leveling
- Sensing

Product Overview

Part Number	Wavelength (nm)	Optical output power (mW)	Laser class	Operating voltage (V DC)	Operating Current (mA)	Operating temperature (°C)
GMP515-1F5	515	0.5-0.99	II	3-5	<300	-10 to +50
GMP515-5F5	515	3-4.99	IIIa	3-5	<300	-10 to +50

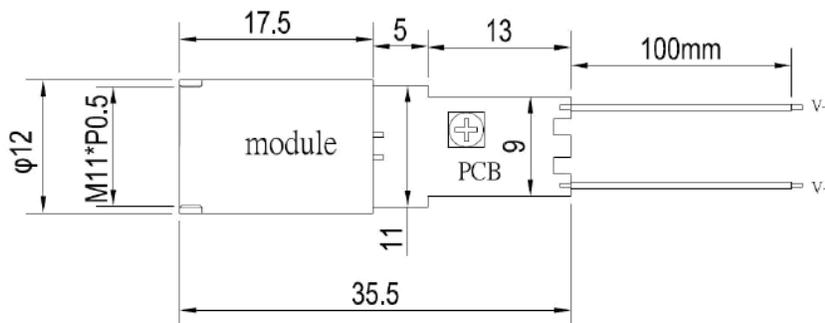
Specifications of GMP515 Series 515nm Green Laser Diode Modules

Wavelength	515+/-10 nm	
Output Power @ 25 °C	0.5-0.99 mW	3-4.99 mW
Laser Class	Class II	Class IIIa
Operating Current ⁽¹⁾ @ 25 °C	<300mA (typical 250mA @ 3VDC, typical 150mA @ 5VDC)	
Operating Voltage	3-5V DC	
Circuit Design	APC (Automatic Power Control)	
Operation Mode	CW	
Beam Profile	Circular	
Beam Divergence	< 1 mrad	
Beam Mode	TEM ₀₀	
Beam Diameter	< 2mm at aperture	
Stability ⁽²⁾	≤ ±5% @ constant temperature	
Connector	Black wire (-); red wire (+)	
Housing	Anodized aluminum	
Operating Temperature	-10 to 50 °C	
Storage Temperature	-10 to 70 °C	
Dimensions (LxWxH)	Ø12mm x L. 17.5+/-0.5 mm (Anodized aluminum housing) + W. 11mm x L. 18mm (driver circuit board)	

Notes:

1. If you run this laser module with DC power supply, please set the current of DC power supply between 1A and 0.9A.
2. Additional heat sink or cooling fan may be needed to disperse the heat and to avoid the laser module from becoming overheated.

Mechanical Outline (unit: mm)



Additional Notes

- The GMP515 series laser modules 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.



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