



GMD532-A Series – 532nm Green Dot DPSS Laser Modules ***Adjustable Focus, 20mm Diameter, 3VDC or 5VDC***



Overview

The Lasermate GMD532-A series laser modules are 532nm green diode-pumped solid-state (DPSS) lasers designed for precision pointing, leveling, and sensing applications. Packaged in a 20mm diameter cylindrical housing, these modules offer adjustable focus optics for flexible beam control. They are available in 3VDC or 5VDC configurations and incorporate an Automatic Power Control (APC) circuit with current limitation to ensure output stability and laser protection. The compact and clean design does not include mounting holes, making it ideal for OEM integration where compact form factor and precise beam alignment are required.

Features

- 532nm green DPSS laser module
- Adjustable focus
- Available with 3VDC or 5VDC operating voltage
- Automatic Power Control (APC) circuit with current limiting
- Cylindrical package (\varnothing 20mm)
- No mounting holes
- Output power stability 5%
- Low cost, compact design

Applications

- Laser pointing
- Leveling and alignment
- Optical sensing systems
- OEM and embedded laser systems

Product Overview

The following table shows the list of available part numbers, wavelength, optical output power, laser class, operating voltage, and operating current for GMD532-A series laser modules.

Part Number	Wavelength (nm)	Output power (mW)	Laser class	Operating voltage (V DC)	Operating Current (A)
GMD532-1A3P1	532	0.5-0.99	II	3	<0.30
GMD532-5A3P1	532	3-5	IIIa	3	<0.30
GMD532-10A3P1	532	7-10	IIIb	3	<0.30
GMD532-20A3P1	532	16-20	IIIb	3	<0.30
GMD532-1A5P1	532	0.5-0.99	II	5	<0.30
GMD532-5A5P1	532	3-5	IIIa	5	<0.30
GMD532-10A5P1	532	7-10	IIIb	5	<0.30
GMD532-20A5P1	532	16-20	IIIb	5	<0.30

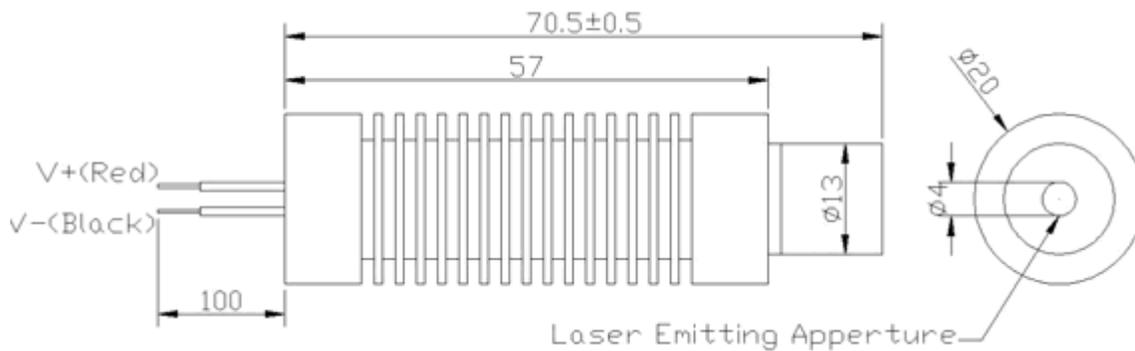
Specifications of GMD532-A Series Green DPSS Laser Modules

Wavelength	532 nm			
Mode	TEM ₀₀			
Output power @ 25 °C	0.5-0.99 mW	3-5 mW	7-10 mW	16-20 mW
Laser class	Class II	Class IIIa	Class IIIb	Class IIIb
Operating Current	<0.30 A			
Operating Voltage	3+/-0.3V DC or 5+/-0.5V DC			
Focus	Adjustable			
Circuit Design	APC (automatic power control)			
Operation Mode	CW			
M ²	< 2			
Linewidth	< 0.1 nm			
Linear Polarization Ratio	≥4:1			
Beam Divergence	<1.2 mrad			
Beam Diameter at aperture	< 1.5 mm			
Output Power Stability for 1hr	<±5% (typical 1%) @ the constant temperature			
Connector	Black (-) & red (+) wires			
Storage Temperature	-10 - 50 °C			
Optimum Operating Temperature	20-30 °C			
MTTF	>3,000 hrs			
Dimensions	Dia. 20mm x L. 70.5+/-0.5mm			

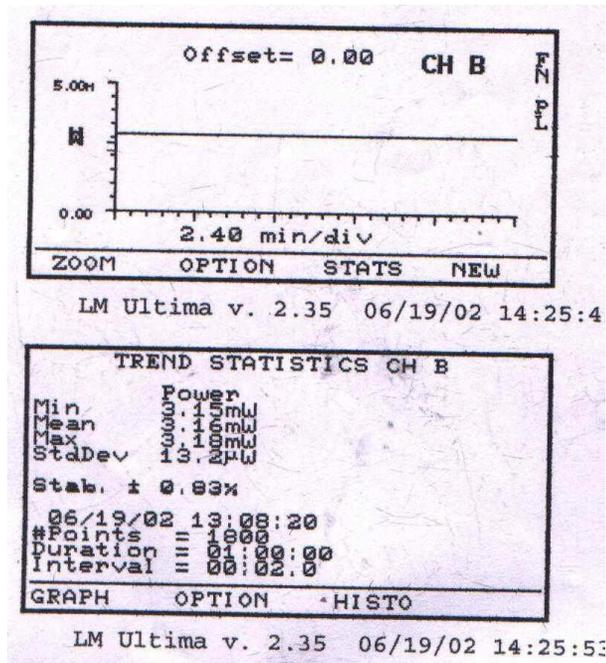
Notes:

1. MTTF (Mean Time to Failure) is based on the MTTF rating of high power 808nm laser diode used from the laser diode manufacturer at 25°C.

Mechanical Outline (unit: mm)



Typical Test Data of the Stability of Optical Output Power for 1hr



Additional Notes

- The GMD532-A series diode pumped solid stated green 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.



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