



532nm Green Dot DPSS Laser Modules, Adjustable Focus, 3VDC or 5VDC, Dia. 20mm

GMD532-A Series



Overview

The Lasermate GMD532-A series laser modules are 532nm green diode-pumped solid-state laser modules in cylinder package available in different output power levels, 3V DC or 5V DC operating voltage and focus adjustable. The laser module also features Automatic Power Control (APC) circuit design and is without mounting holes.

Features

- 532nm green DPSS laser module
- Automatic Power Control (APC) circuit with limited current
- Low cost
- Adjustable focus
- Cylinder package
- Without mounting hole
- Output power stability 5%
- Compact size

Applications

- Pointing
- Leveling
- Sensing

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

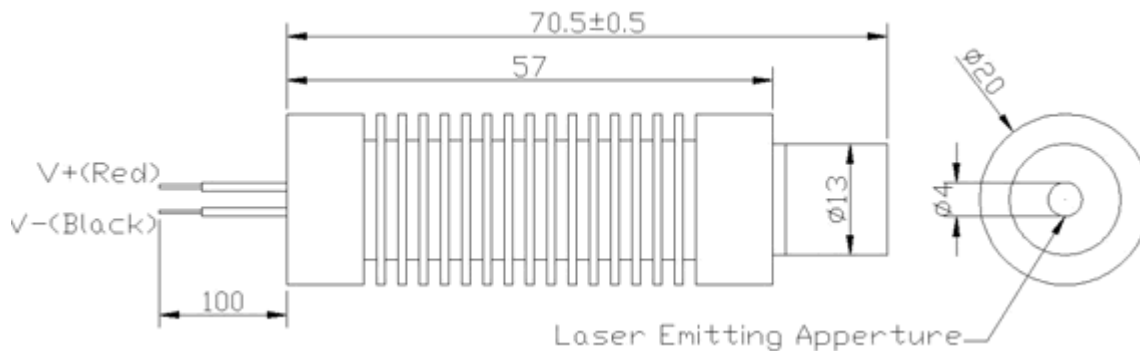
Specifications of GMD532-A Series 532nm Green DPSS Laser Modules

Model Number	GMD532-XA3P1	GMD532-XA5P1
Wavelength	532 nm	
Mode	TEM ₀₀	
Output power (mW) @ 25 °C	0.5-0.99 (X=1); 3-5 (X=5); 7-10 (X=10); 16-20 (X=20)	
Laser class	Class II: X=1; Class IIIa: X=5; Class IIIb: X=10 & 20	
Operating Current (A)	<0.30	
Operating Voltage	3+/-0.3V DC	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	

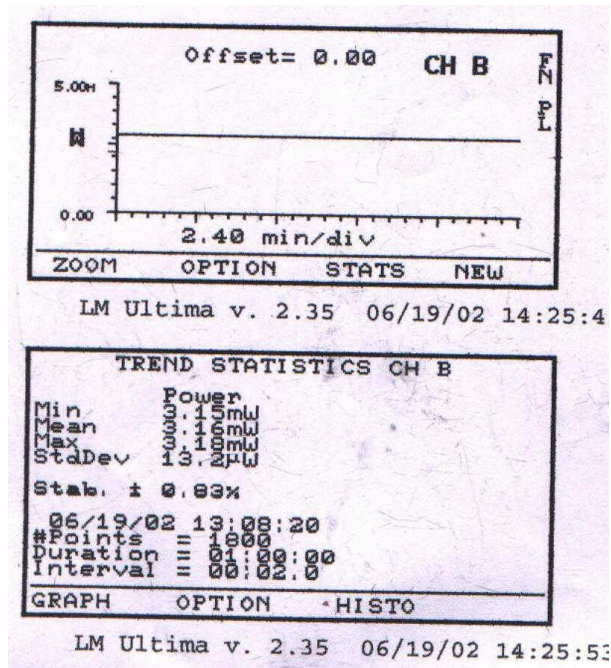
Notes:

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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