

Data Sheet

Rev 01.1220

532nm Line Generating Green DPSS Laser Modules, 60-Degree Line Optics, Dia. 12mm

GMP532-L60 Series



Overview

The Lasermate GMP532-L60 series green line generating laser module with wavelength at 532nm is designed for OEM applications with line profile and miniature size. The laser module features 60-degree line generating optics.

Features

- 532nm green DPSS laser module
- Automatic Power Control (APC) circuit with limited current to protect module
- Low operating current
- Compact size
- Output power stability 5%
- With ~60-degree line generating lens

Product Overview

The following table shows the list of available part numbers, wavelength, optical output power, laser class, operating voltage, operating current, and operating temperature for GMP532-L60 series laser modules.

Part Number	Wavelength (nm)	Output power (mW)	Laser class	Operating Current (A)	Operating Voltage (V DC)	Operating Temperature (°C)
GMP532-1F3-CP-L60	532	0.5-0.99	II	<0.30	3	22-28
GMP532-5F3-CP-L60	532	3-4.99	Illa	<0.30	3	22-28
GMP532-10F3-CP-L60	532	7-10	IIIb	<0.30	3	22-28
GMP532-20F3-CP-L60	532	16-20	IIIb	<0.30	3	22-28

Specifications of GMP532-L60 Series 532nm Green DPSS Laser Modules with 60° Line Generating Optics

Model Number	GMP532-XF3-CP-L60						
Wavelength	532 nm						
Mode	TEM ₀₀						
Output power (mW) @ 3VDC, 25 °C	0.5-0.99 (X=1)	3-4.99 (X=5)	7-10 (X=10)	16-20 (X=20)			
Laser Class	Class II	Class IIIa	Class IIIb	Class IIIb			
Operating Current (A)	<0.30						
Operating Voltage	3V DC						
Circuit Design	APC with limited current, CW operation mode						
Stability	≤±5% @ 25 ± 3 °C						
Full Fan Angle	~60 degree						
Length of Laser Line	120cm @ 1m; 360cm @3m						
Width of Laser Line	<2mm @ 1m; <3mm @3m						
Connector	Standard: Black wire (-); red wire & brass case (+)						
Length of wires	10 cm						
Storage Temperature	10 - 50 °C						
Optimum Operating Temperature	22 - 28 °C						
Expected Lifetime	>3,000 hr						
Dimensions (LxW)	Dia. 12mm x L. 35+/-1mm (green laser head), 9mm x 16.5 mm (driver circuit board)						

Notes:

- 1. Additional heat sink or cooling fan may be needed to stabilize the output power of laser module if the laser module is operated continuously in a period of time.
- 2. The expected lifetime of green laser module is based on the MTTF (Mean Time To Failure) rating of 808nm laser diode used in the green laser module.

Additional Notes

- The GMP532-L60 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.



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