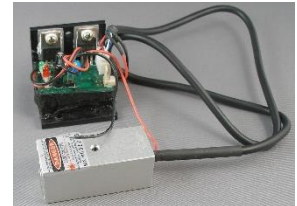




## 532nm Green Dot DPSS Laser Modules, Rectangular Package, Fixed Focus, 9-15VDC, Mounting Screw Holes

### GME532 Series



### Overview

The Lasermate GME532 series laser modules are 532nm green diode-pumped solid-state laser modules in rectangular package available in different output power levels, 9-15V DC operating voltage and focus fixed. The laser module also features Automatic Power Control (APC) circuit design and with mounting screw holes.

### Features

- 532nm green DPSS laser module
- Automatic Power Control (APC) circuit with limited current
- Low cost
- Fixed focus
- Rectangular package
- With mounting screw holes
- 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, operating current, and optional AC adapter for GME532 series laser modules.

Part Number	Wavelength (nm)	Output power (mW)	Laser class	Operating voltage (V DC)	Operating Current (A)	AC Adapter included
GME532-1F9P1	532	0.5-0.99	II	9-15	<0.30	No
GME532-5F9P1	532	3-4.99	IIIa	9-15	<0.30	No
GME532-10F9P1	532	7-10	IIIb	9-15	<0.30	No
GME532-20F9P1	532	16-20	IIIb	9-15	<0.30	No
GME532-1FBP1	532	0.5-0.99	II	9-15	<0.30	Yes
GME532-5FBP1	532	3-4.99	IIIa	9-15	<0.30	Yes
GME532-10FBP1	532	7-10	IIIb	9-15	<0.30	Yes
GME532-20FBP1	532	16-20	IIIb	9-15	<0.30	Yes

### Specifications of GME532 Series 532nm Green DPSS Laser Modules

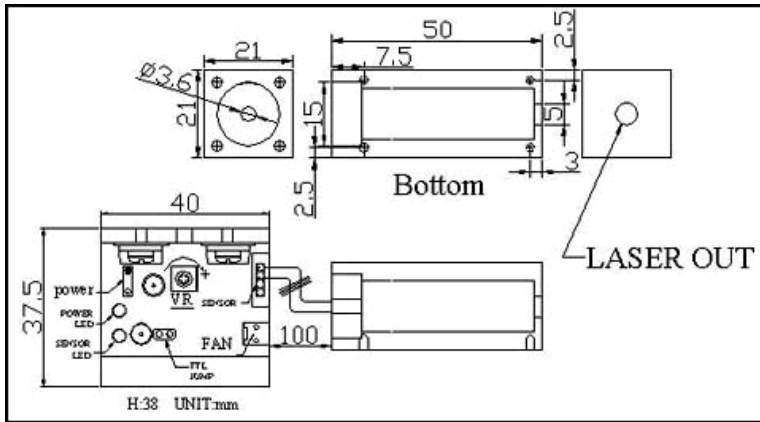
Model Number	GME532-XFYP1			
Wavelength	532 nm			
Mode	TEM <sub>00</sub>			
Output power (mW) @ 25 °C	0.5-0.99 <b>(X=1)</b>	3-4.99 <b>(X=5)</b>	7-10 <b>(X=10)</b>	16-20 <b>(X=20)</b>
Laser Class	Class II	Class IIIa	Class IIIb	Class IIIb
Operating Current (A)	<0.30			
PCB Driver	9-15V DC <b>(Y=9)</b> ; PCB driver in box with switch <b>(Y=B)</b>			
Focus	Fixed			
Circuit Design	APC			
Operation Mode	CW			
Linewidth	< 0.1 nm			
Linear Polarization	Standard ≥4:1			
Beam Divergence	<1.2 mrad			
Beam Diameter (1/e <sup>2</sup> )	< 1.5 mm at aperture			
Output Power Stability	<±5% (typical <1%) at 25°C constant temperature			
Connector	Black (-) & red (+) wires			
Storage Temperature	10 - 50 °C			
Optimum Operating Temperature	20-30 °C			
Optional	TTL modulation up to 1KHz			
MTTF	>3,000 hrs			
Dimensions (LxWxH)	50mm x 21mm x 21mm (green laser head): (Mounting holes: Front: 4- M3 x P0.5 and depth 5mm; Bottom: 4- M2 x P0.4 and depth 4mm) For <b>Y=9</b> , W. 40mm x L. 37.5mm x H. 38mm (PCB driver including heat sink) For <b>Y=B</b> , W. 60mm x L. 80mm x H. 45.5mm (PCB driver in box)			

#### 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.

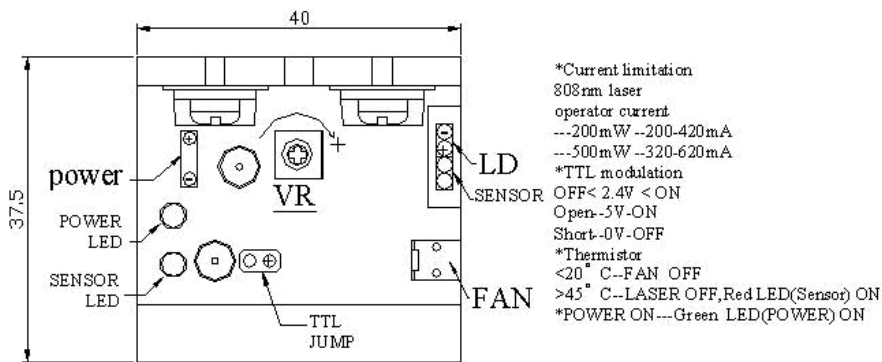
**Mechanical Outline (unit: mm)**

**Laser Module**

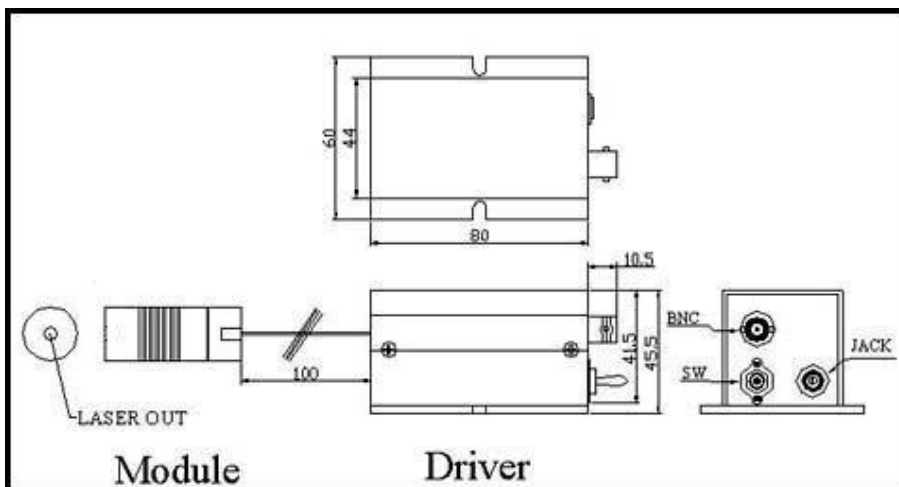


**PCB Driver**

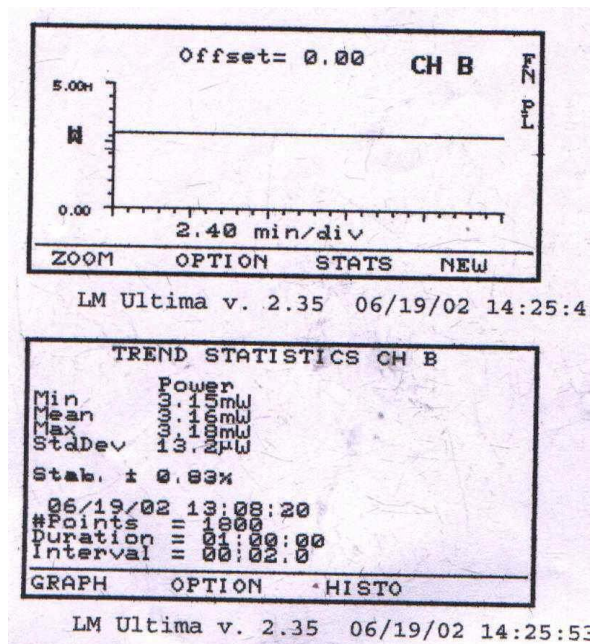
**9-15V PCB (Y=9)**



**Subassembly PCB in Box with Switch (Y=B)**



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



### Additional Notes

- The GME532 series diode pumped solid stated green laser modules, which use laser diode pumped Nd:YVO<sub>4</sub> 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](mailto:sales@lasermate.com)  
[www.lasermate.com](http://www.lasermate.com)