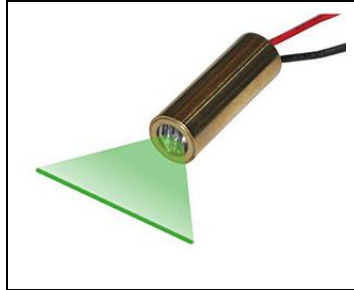


Economical Green Line Laser

VLM-520-28 LPT



FEATURES:

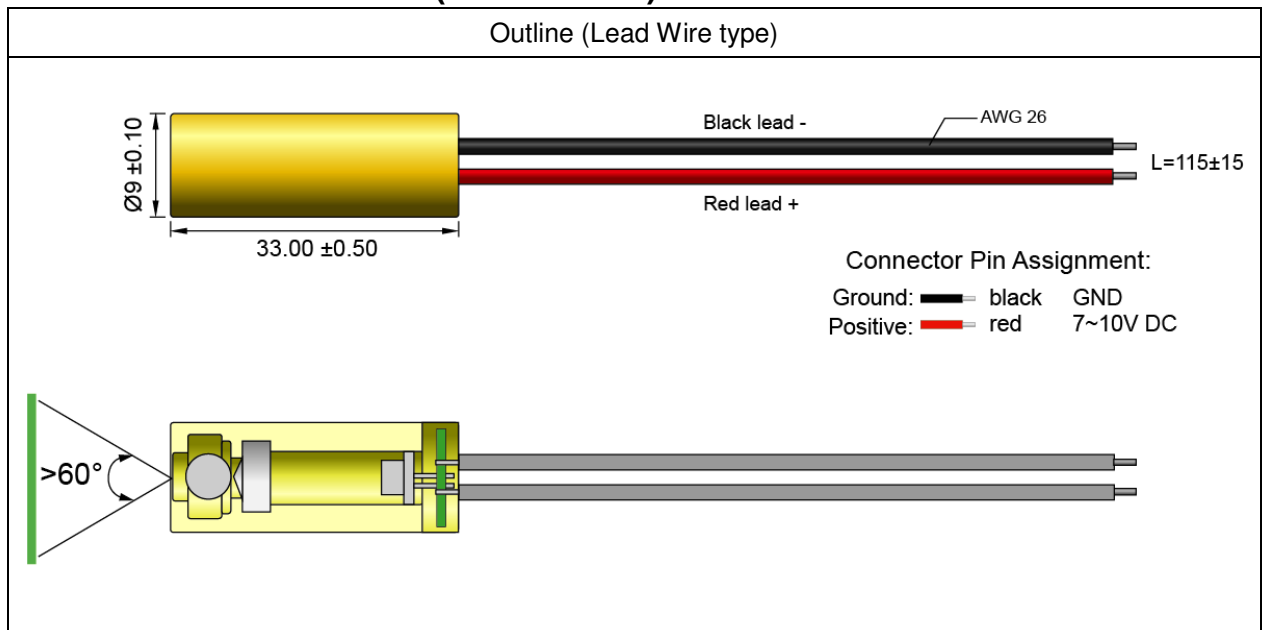
- Direct Green Laser Diode for large temperature operation range.
- Although it is an economical solution for laser line generator applications, this module adopts industrial-grade high-performance design.
- Laser beam is focused at 1 meter to generate thin laser line from 0.5 meter to 1.5 meters.
- Mean time to failure (MTTF) of the laser diode at 25°C: 10,000 hours.
- This module has integrated wave lens, collimating lens, laser diode, and APC driver circuit.
- APC driver circuit enables the Laser power output safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- Aspherical Plastic Lens and Plastic Wave Lens provides tight Line Laser.
- Dimensions : Ø9 x 33 mm (Ø0.354" x 1.299")
- Wavelength : 510~530 nm
- Laser power output : LPT - Class 1M - less than 0.39mW.
- Emitting Angle : > 60°
- 7~10 VDC operation.
- Connection type : Lead wire

APPLICATIONS:

- Economical Green Line Laser Module, Line-width optimize at short distance(1m) for consumer grade 3d-Scanner, barcode reader, leveling, alignment, adjusting, positioning, measuring and targeting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

VLM-520-28 LPT

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

| SPECIFICATIONS | | VLM-520-28 LPT |
|----------------|----------------------------------|-------------------------------|
| 1 | Dimensions | Ø9 x 33 mm (Ø0.354" x 1.299") |
| 2 | Operating voltage (Vop) | 7~10 VDC |
| 3 | Operating current (Iop) | Less than 100mA |
| 4 | Optical power* | Less than 4.5mW |
| 5 | Laser power output** | Less than 0.39mW |
| 6 | Laser class | Class 1M |
| 7 | Wavelength at peak emission (λp) | 510~530nm |
| 8 | Line lens | Plastic lens |
| 9 | Collimating lens | Aspherical plastic lens |
| 10 | Beam shape | Line |
| 11 | Laser line width | 1.2mm@1m |
| 12 | Laser line accuracy | 80" (+/- 2mm @5M) |
| 13 | Emitting angle | More than 60° |
| 14 | Operating temp. range*** | +15°C ~+30°C |
| 15 | Storage temp. range | -20°C ~+65°C |
| 16 | Housing material | Brass |
| 17 | Potential of housing**** | VDD(+) |

VLM-520-28 LPT

| | | |
|----|----------------------------------|------------------------------------|
| 18 | Electrostatic discharge (ESD) | 30KV |
| 19 | Moisture sensitivity level (MSL) | Level 1 - acc to JEDEC J-STD-020E. |
| 20 | Wire type | 1007-26AWG |
| 21 | Cable length | 115±15mm |
| 22 | Mean time to failure (MTTF) 25°C | 10000hrs |
| 23 | Application | Economic 3D scanner |
| 24 | Suggestion work distance | 0.3~1.8 meters / 1~6 feet |

* Optical power is total power output measured at the aperture of the laser.

** According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

*** Operation temperature means within this temperature range, the laser spot/line will not be affected to change the spot size/line width. It can still work over this range, but the laser spot size or laser line width will be larger.

**** Laser module housing is an electrical positive surface, it is imperative that contact between the laser module and the machine be avoided. This is to prevent damage from the machine electrical leakage. Surge protected power supply to the laser module is strongly recommended.

ORDER CODE

| Order Code | Wavelength | Optical power* | Laser power output** | Laser Class | Connection Type |
|----------------|------------|-----------------|----------------------|-------------|-----------------|
| VLM-520-28 LPT | 520 nm | Less than 4.5mW | Less than 0.39mW | Class 1M | Lead Wire |

* Optical power is total power output measured at the aperture of the laser.

** According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

SAFETY LABEL

CLASS I LASER PRODUCT