

Straight Green Line Laser

VLM-520-27 Series



FEATURES:

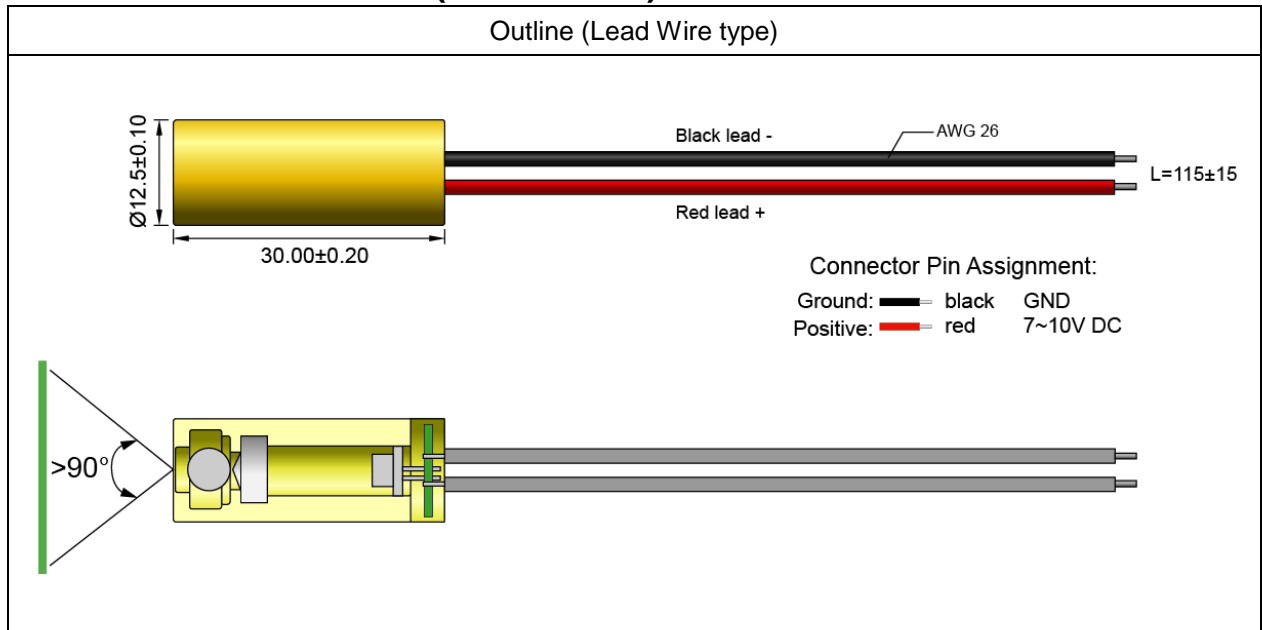
- Direct Green Laser Diode for large temperature operation range.
- The best line-accuracy and the widest emitting angle line laser module for use with high-precision devices.
- Laser beam is focused at 10 meters to generate best thin laser line from 5 meters to 20 meters.
- This module has integrated quartz cylindrical 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 Quartz Cylindrical Lens provides tight Line Laser.
- Dimensions : Ø12.5 x 30 mm (Ø0.492" x 1.181")
- Wavelength : 505~530 nm
- Laser power output : Class I
- Emitting Angle : >90°
- 7~10 VDC operation.
- Connection type : Lead wire

APPLICATIONS:

- Straight Green Line from Direct Green Laser Diode.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

VLM-520-27 Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

SPECIFICATIONS		VLM-520-27	
		LPT	LPA
1	Dimensions	$\varnothing 12.5 \times 30$ mm ($\varnothing 0.492" \times 1.181"$)	
2	Operating voltage (Vop)	7~10 VDC	
3	Operating current (Iop)	Less than 80mA	Less than 100mA
4	Optical power*	4~5mW	9~10mW
5	Laser class	Class I	
6	Wavelength at peak emission (λ_p)	505~530nm	
7	Collimating lens	Aspherical plastic lens	
8	Line lens	Plastic lens	
9	Beam shape	Line	
10	Laser Line width@10M	Less than 3.5mm	
11	Laser line accuracy	40" (± 1 mm @5M)	
12	Emitting angle	More than 90°	
13	Operating temp. range**	$+15^\circ\text{C} \sim +30^\circ\text{C}$	
14	Storage temp. range	$-20^\circ\text{C} \sim +65^\circ\text{C}$	
15	Housing material	Brass	
16	Potential of housing***	VDD(+)	

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17	Electrostatic discharge (ESD)	30KV
18	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.
19	Wire type	1007-26 AWG
20	Cable length	115±15mm
21	Mean time to failure (MTTF) 25°C	10000hrs
22	Application	General industrial alignment
23	Suggestion work distance	Above 2 meters

* Optical power is total power output measured at the aperture 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 Class	Connection Type
VLM-520-27 LPT	520 nm	4~5mW	Class I	Lead Wire
VLM-520-27 LPA	520 nm	9~10mW	Class I	Lead Wire

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

SAFETY LABEL

CLASS I LASER PRODUCT