Quarton inc.

Industrial Green Dot Laser

VLM-520-53 Series

	
Lead Wire Type	Spring Type

FEATURES:

- VDD(+) housing and GND spring for special applications.
- Direct Green Laser Diode module to provide large temperature operation range.
- High quality round green Laser spot with low beam divergence angle, ideal for industrial application.
- Industrial use laser modules have 10,000 hours working life.
- This module has integrated optic, direct green laser diode, and APC driver circuit.
- APC driver circuit enables the Laser output power safe and constant.
- Dimensions : Ø10.5 x 31mm (Ø0.414" x 1.22")
- Wavelength : 505~530 nm
- Laser power output : LPA - Class IIIa – less than 4mW.
  LPT - Class II – less than 1mW.
- Beam Divergence (Half Angle) : 0.4 mRad
- 3~6 VDC operation.
- Connection type : Lead wire / Spring

APPLICATIONS:

- Industrial Green Dot Laser Module - for positioning, measuring, pointing and laser sighting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

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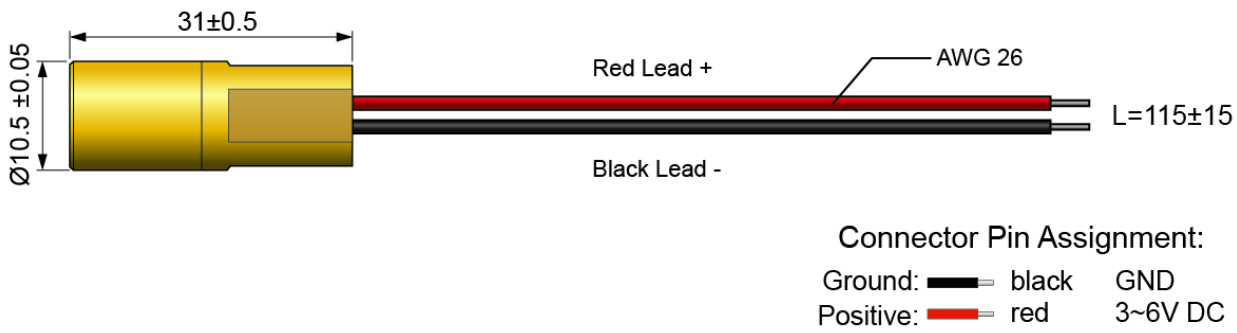
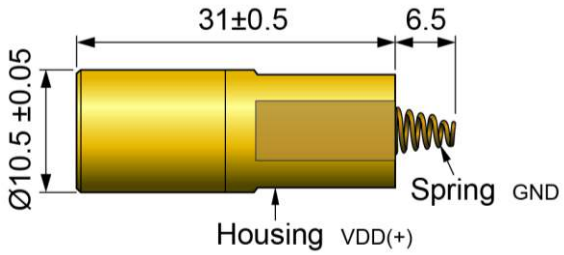
OUTLINE DIMENSIONS (UNITS: mm)

Outline (Lead Wire type)



Outline (Spring type)



SPECIFICATIONS

	SPECIFICATIONS	VLM-520-53			
		LPT	**LPA**	**SPT**	**SPA**
1	Dimensions	Ø10.5 x 31 mm (Ø0.414" x 1.22")			
2	Weight	9g			
3	Operating voltage (Vop)	3~6 VDC			
4	Operating current (Iop)	Less than 150mA			
5	Laser power output	Less than 1mW	Less than 4mW	Less than 1mW	Less than 4mW
6	Laser class	Class II	Class IIIa	Class II	Class IIIa
7	Wavelength at peak emission (λp)	505~530nm			
8	Collimating lens	Aspherical Glass lens			
9	Output aperture	5mm			
10	Beam shape	Ellipse			
11	Spot size at 10M	5±1 mm			
12	Divergence (Half Angle)	Less than 0.4 mRad			
13	Beam alignment	Less than 3°			
14	Operating temp. range*	-20°C ~+60°C			
15	Storage temp. range	-20°C ~+85°C			

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16	Housing material	Bronze	
17	Potential of housing**	VDD(+)	
18	Electrostatic discharge (ESD)	30KV	
19	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	
20	Connection type	1007-26 AWG	Spring
21	Cable length	115±15mm	6.5±1mm
22	Mean time to failure (MTTF) 25°C	10000hrs	
23	Application	Industrial application	
24	Suggestion work distance	1~30 meters / 3~100 feet	

* Operation temperature: it 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	Laser Power Output	Laser Class	Connection Type
VLM-520-53 LPA	520 nm	Less than 4mW	Class IIIa	Lead Wire
VLM-520-53 LPT	520 nm	Less than 1mW	Class II	Lead Wire
VLM-520-53 SPA	520 nm	Less than 4mW	Class IIIa	Spring
VLM-520-53 SPT	520 nm	Less than 1mW	Class II	Spring

SAFETY LABEL