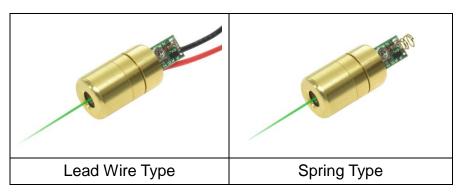
# Quarton inc.

## **Industrial Green Dot Laser**

## VLM-520-02 Series



#### **FEATURES:**

- Direct Green Laser Diode module to provide large temperature operation range for industry application.
- PCB is outside of housing for power adjustment.
- Adjustment focus (Focus range 100mm~Infinity) Laser module with APC Driver Circuit inside, ideal for industrial Laser application.
- This module has integrated optic, laser diode, and APC driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- Aspherical plastic lens provides tight Dot Laser.
- Dimensions: Ø10.5 x 26 mm (Ø0.413" x 1.023")
- Wavelength: 505~530 nm
- Laser power output: LPA Class IIIa less than 4mW.

LPT - Class II – less than 1mW.

- Beam Divergence (Half Angle): 0.5 mRad
- 7~10 VDC operation.
- Connection type: Lead wire / Spring

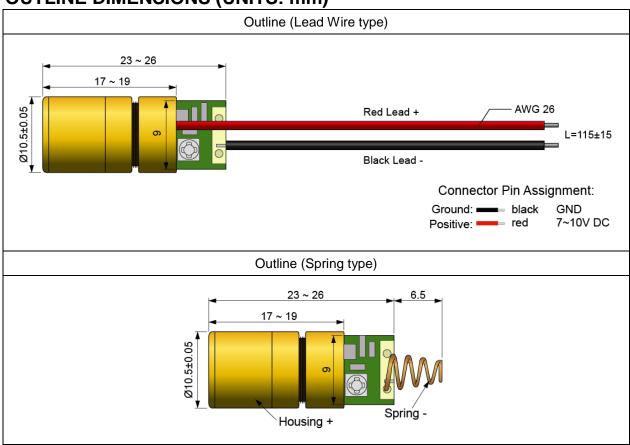
#### **APPLICATIONS:**

- Industrial Green Dot Laser Module Adjustable focus function. Ideal for Industrial positioning, measuring, pointing which would need a focusable beam at specific distances.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

# Quarton inc.

## VLM-520-02 Series

## **OUTLINE DIMENSIONS (UNITS: mm)**



### **SPECIFICATIONS**

SPECIFICATIONS		VLM-520-02			
		LPT	LPA	SPT	SPA
1	Dimensions	Ø10.5 x 26 mm (Ø0.413" x 1.023")			
2	Operating voltage (Vop)	7~10 VDC			
3	Operating current (lop)	Less than 80mA	Less than 100mA	Less than 80mA	Less than 100mA
4	Laser power output	Less than 1mW	Less than 4mW	Less than 1mW	Less than 4mW
5	Laser class	Class II	Class IIIa	Class II	Class IIIa
6	Wavelength at peak emission (λp)	505~530nm			
7	Collimating lens	Aspherical plastic lens			
8	Output aperture	4mm			
9	Beam shape	Ellipse			
10	Spot size	Adjustment focus			
11	Divergence (Half Angle)	0.5 mRad			
12	Beam alignment	Less than 3°			
13	Operating temp. range*	+10°C ~+40°C			



## VLM-520-02 Series

14	Storage temp. range	-20°C ~+65°C		
15	Housing material	Brass		
16	Potential housing**	VDD(+)		
17	Electrostatic discharge (ESD)	30KV		
18	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.		
19	Connection type	1007-26AWG	Spring	
20	Cable length	115±15mm	6.5±1mm	
21	Mean time to failure (MTTF) 25°C	10000hrs		
22	Application	Focus adjustable		
23	Suggestion work distance	1~30 meters / 3~100 feet		

<sup>\*</sup> 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.

#### **ORDER CODE**

Order Code	Wavelength	Laser Power Output	Laser Class	Connection Type
VLM-520-02 LPA	520 nm	Less than 4mW	Class IIIa	Lead Wire
VLM-520-02 LPT	520 nm	Less than 1mW	Class II	Lead Wire
VLM-520-02 SPA	520 nm	Less than 4mW	Class IIIa	Spring
VLM-520-02 SPT	520 nm	Less than 1mW	Class II	Spring

### **SAFETY LABEL**





<sup>\*\*</sup> 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.