Quarton inc.

Industrial Green Dot Laser

VLM-520-01 Series



FEATURES:

- Direct Green Laser Diode module to provide large temperature operation range for industry application.
- Basic module, compact size with APC Driver Circuit Inside, ideal for industrial green 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 : Ø10.4 x 18.4mm (Ø0.409" x 0.724")
- 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

APPLICATIONS:

- Basic module, compact size with APC Driver Circuit inside, ideal for industrial application 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)



SPECIFICATIONS

SPECIFICATIONS		VLM-520-01		
		LPT	LPA	
1	Dimensions	Ø10.4 x 18.4 mm (Ø0.409" x 0.724")		
2	Weight	9g		
3	Operating voltage (Vop)	7~10 VDC		
4	Operating current (lop)	Less than 80mA	Less than 100mA	
5	Laser power output	Less than 1mW	Less than 4mW	
6	Laser class	Class II	Class Illa	
7	Wavelength at peak emission (λp)	505~530nm		
8	Collimating lens	Aspherical plastic lens		
9	Output aperture	5mm		
10	Beam shape	Ellipse		
11	Spot size at 3M	Less than 4.5mm		
12	Divergence (Half Angle)	0.5 mRad		
13	Beam alignment	Less than 3°		
14	Operating temp. range*	+10°C ~+40°C		
15	Storage temp. range	-20°C ~+65°C		
16	Housing material	Brass		
17	Potential of housing**	VDD(+)		
18	Electrostatic discharge (ESD)	30KV		

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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	General purpose	
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-520-01 LPA	520 nm	Less than 4mW	Class IIIa	Lead Wire
VLM-520-01 LPT	520 nm	Less than 1mW	Class II	Lead Wire

SAFETY LABEL





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