Quarton inc.

IR Economical Laser

VLM-850-03 Series



FEATURES:

- Economical Infrared Dot Laser.
- Economical solution for invisible IR Laser application.
- This module has integrated optic, laser diode, and APC driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Aspherical plastic lens provides Dot Laser.
- Dimensions : Ø7 x 21 mm (Ø 0.276" x 0.827").
- Wavelength: 850 nm
- Laser power output: LPT Class I less than 0.7mW

LPA - Class IIIb - less than 3mW.

- Beam Divergence (Half Angle): 0.6 mRad
- 2.6~6 VDC operation.
- Connection type: Lead wire.

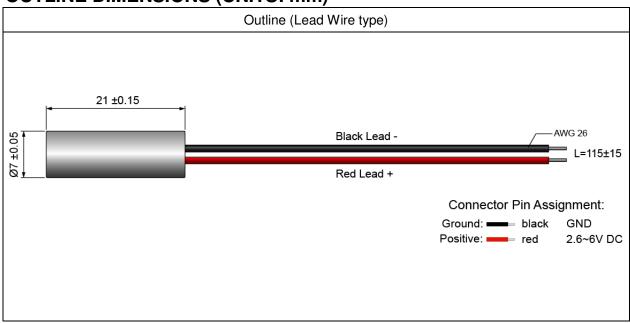
APPLICATIONS:

- Invisible IR Dot Laser 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

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SPECIFICATIONS		LPT	LPA	
1	Dimensions	Ø7 x 21 mm (Ø0.276" x 0.827")		
2	Operating voltage (Vop)	2.6~6 VDC		
3	Operating current (lop)	Less than 30mA		
4	Laser power output	Less than 0.7mW	Less than 3mW	
5	Laser class	Class I	Class IIIb	
6	Wavelength at peak emission (λp)	840~865nm		
7	Collimating lens	Aspherical plastic lens		
8	Output aperture	3mm		
9	Beam shape	Ellipse		
10	Spot size at 5M	6±1 mm		
11	Divergence (Half Angle)	0.6 mRad		
12	Operating temp. range*	+15°C ~+30°C (Room Temperature)		
13	Storage temp. range	-20°C ~+65°C		
14	Housing	Steel		
15	Potential of housing**	VDD(+)		
16	Electrostatic discharge (ESD)	20KV		
17	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.		



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18	Connection type	1007-26 AWG	
19	Cable length	115±15mm	
20	Mean time to failure (MTTF) 25°C	5000hrs	
21	Application	Economic type	
22	Suggestion work distance	1~10 meters / 3~40 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.

ORDER CODE

Order Code	Wavelength	Laser power output	Laser class	Connection Type
VLM-850-03 LPA	850 nm	Less than 3mW	Class IIIb	Lead Wire
VLM-850-03 LPT	850 nm	Less than 0.7mW	Class I	Lead Wire

SAFETY LABEL

CLASS I LASER PRODUCT



^{**} 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.