Quarton inc.

Industrial Use Laser

VLM-635-01G Series

	
Lead Wire Type	Spring Type

FEATURES:

- Industrial Red Dot Laser.
- Glass aspherical lens for wide operating temperature range 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.
- Utilize Glass Lens, spot-size maintain tight-dot while temperature fluctuate between -20°C ~50°C.
- Dimensions : Ø10.4 x 18.4mm (Ø0.409" x 0.724")
- Wavelength : 635 nm
- Laser power output : LPA - Class IIIa – less than 2.5mW
  LPT - Class II – less than 1mW.
- Beam Divergence (Half Angle) : 0.4 mRad
- 2.6~6 VDC operation.
- Connection type : Lead wire / Spring.

APPLICATIONS:

- Industrial Red Dot Laser – glass aspherical lens for wide operating temperature range. Ideal for Industrial 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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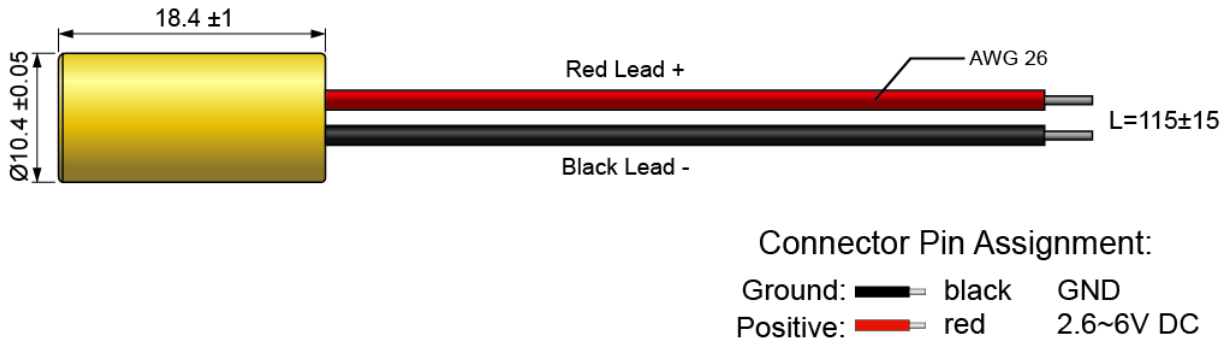
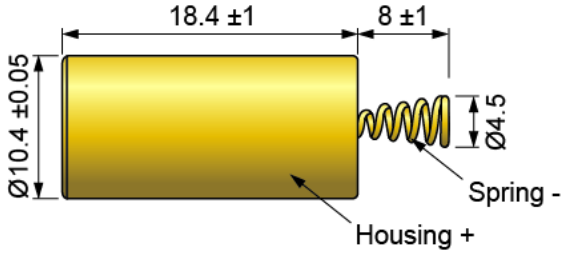
OUTLINE DIMENSIONS (UNITS: mm)

Outline (Lead Wire type)



Outline (Spring type)



SPECIFICATIONS

SPECIFICATIONS		VLM-635-01G			
		LPT	**LPA**	**SPT**	**SPA**
1	Dimensions	Ø10.4 x 18.4 mm (Ø0.409" x 0.724")			
2	Weight	9g			
3	Operating voltage (Vop)	2.6~6 VDC			
4	Operating current (Iop)	Less than 35mA	Less than 50mA	Less than 35mA	Less than 50mA
5	Laser power output	Less than 1mW	Less than 2.5mW	Less than 1mW	Less than 2.5mW
6	Laser class	Class II	Class IIIa	Class II	Class IIIa
7	Wavelength at peak emission (λp)	630~645nm			
8	Collimating lens	Glass lens			
9	Output aperture	5mm			
10	Beam shape	Ellipse			
11	Spot size at 5M	4±1mm			
12	Divergence (Half Angle)	0.4 mRad			
13	Beam alignment	Less than 3°			
14	Operating temp. range*	-20°C ~+50°C			

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15	Storage temp. range	-20°C ~+65°C	
16	Housing material	Brass	
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	1007-26AWG	Spring
21	Cable length	115±15mm	8±1mm
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-635-01G LPA	635 nm	Less than 3mW	Class IIIa	Lead Wire
VLM-635-01G LPT	635 nm	Less than 1mW	Class II	Lead Wire
VLM-635-01G SPA	635 nm	Less than 3mW	Class IIIa	Spring
VLM-635-01G SPT	635 nm	Less than 1mW	Class II	Spring

SAFETY LABEL