

Straight Red Line Laser

VLM-635-55 Series



FEATURES:

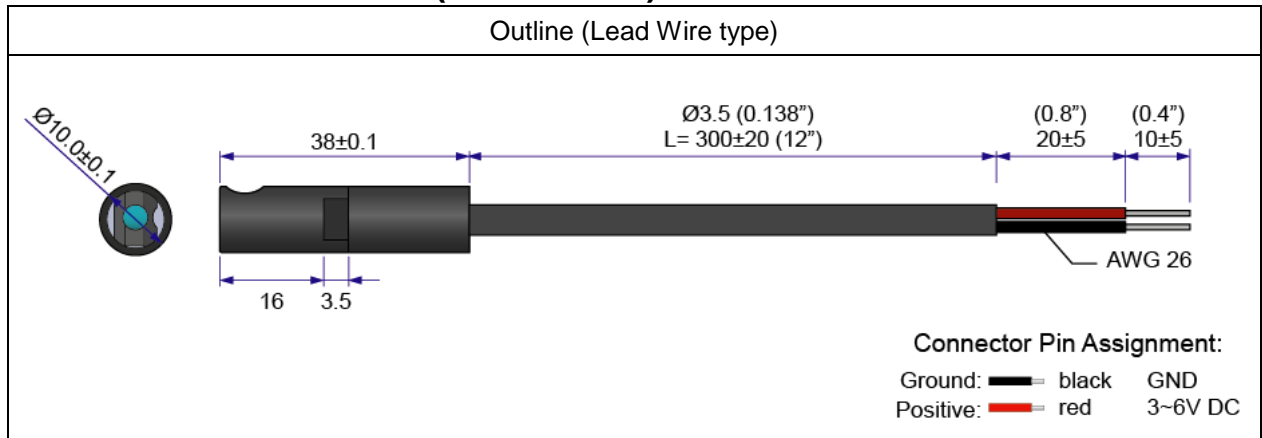
- Red Laser Diode for large temperature operation range.
- High quality straight red line laser, ideal for industrial application.
- Laser beam is focused at 10 meters to generate best thin laser line from 3 meters to 20 meters.
- Industrial use laser modules have 10,000 hours working life.
- This module has integrated optic, red laser diode, and APC driver circuit.
- APC driver circuit enables the Laser power output safe and constant.
- Dimensions : Ø10 x 38 mm (Ø0.393" x 1.496")
- Wavelength : 630~645 nm
- Laser power output : Class 1 Laser product.
- Fan Angle : 60°
- 3~6 VDC operation.
- Connection type : Lead wire

APPLICATIONS:

- Straight Red Line from Red Laser Diode.
- 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-635-55	
		LPO	LPT
1	Dimensions	Ø10 x 38 mm (Ø0.393" x 1.496")	
2	Weight	6g	
3	Operating voltage (Vop)	3~6 VDC	
4	Operating current (Iop)	Less than 80mA	Less than 100mA
5	Optical power*	4~5mW	9~10mW
6	Laser power output**	Less than 1mW	
7	Laser class	Class 1	
8	Wavelength at peak emission (λp)	630~645nm	
9	Collimating lens	Glass lens	
10	Line lens	Glass lens	
11	Beam shape	Line	
12	Laser line width	3±0.5mm@5M, 6±0.5mm@10M	
13	Laser line accuracy***	4/1000(<1.6mm @400mm)	
14	Fan Angle	60°	
15	Operating temp. range	-20°C ~+65°C	
16	Storage temp. range	-20°C ~+85°C	
17	Housing material	Aluminum	
18	Potential of housing	Insulated	
19	Electrostatic discharge (ESD)	30KV	
20	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	

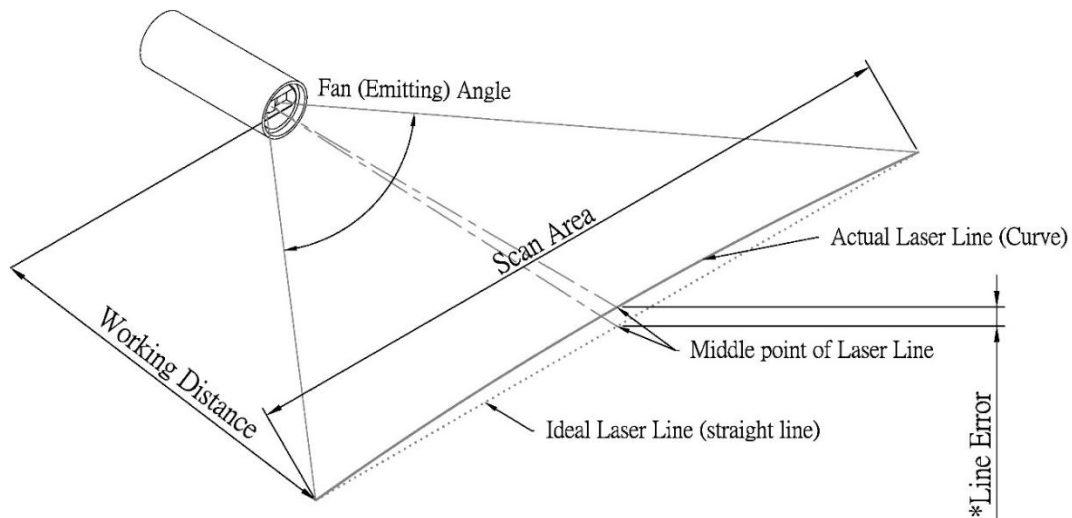
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21	Protection circuit	Reversed supply circuit protection, over-current protection, surge protection, short circuit protection
22	Vibration resistance	10 to 55Hz, 1.5mm amplitude for 2 hours each in X, Y and Z direction
23	Standard	IEC60825:2014
24	Wire type	2464 2-WIRE CABLE 26 AWG
25	Cable length	330±30mm
26	Mean time to failure (MTTF) 25°C	10000hrs
27	Application	Precision industrial alignment
28	Suggestion work distance	3~20 meters / 10~60 feet

* Total output power measured at the aperture of the laser.

** According to IEC 60825-1 regulations, laser power is measured by 7 mm aperture stop at the position of 10cm.

*** Laser Line Accuracy:



$$*\text{Laser Line Accuracy} = \frac{\text{Line Error at middle point}}{\text{Scan Area}}$$

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ORDER CODE

Order Code	Wavelength	Optical power [*]	Laser Class	Connection Type
VLM-635-55 LPO	635 nm	4~5mW	Class 1	Lead Wire
VLM-635-55 LPT	635 nm	9~10mW	Class 1	Lead Wire

^{*} Total output power measured at the aperture of the laser.

SAFETY LABEL

CLASS I LASER PRODUCT