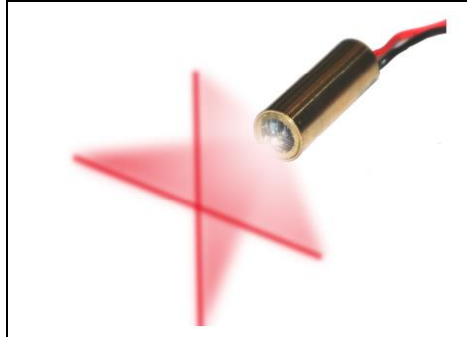


## Cross Line Laser

### VLM-650-29 LPT



#### FEATURES:

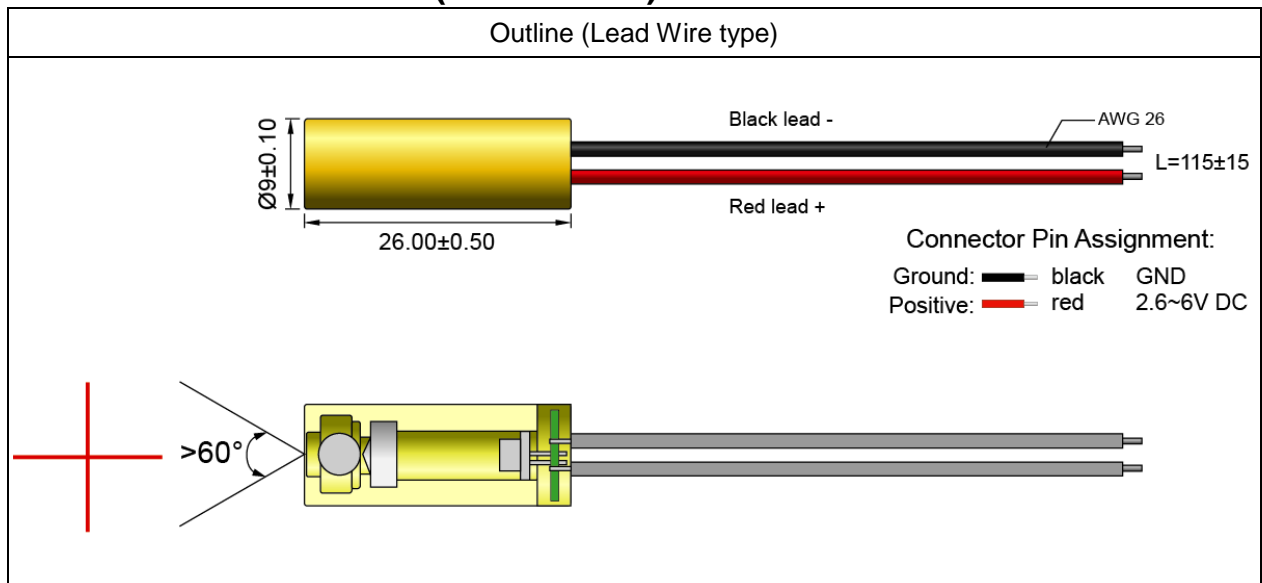
- Red Cross-Line Laser.
- Line-width optimize at short distance(40cm) for consumer grade Laser Cross-Line generator applications.
- This module has integrated wavy lens, collimating lens, laser diode, and APC driver circuit.
- APC driver circuit enables the Laser output power safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- Aspherical Plastic Lens and Plastic Wavy Lens provides Cross-Line Laser.
- Dimensions : Ø9 x 26 mm (Ø0.354" x 1.024")
- Wavelength : 650 nm
- Laser power output : LPT - Class 1M - less than 0.39mW
- Laser line accuracy: 80"
- Emitting Angle : >60°
- 2.6~6 VDC operation.
- Connection type : Lead wire

#### APPLICATIONS:

- Red Cross-Line Laser, Line-width optimize at short distance(40cm) for consumer grade barcode reader, leveling, alignment, adjusting, positioning, measuring, targeting and sighting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

## VLM-650-29 LPT

### OUTLINE DIMENSIONS (UNITS: mm)



### SPECIFICATIONS

SPECIFICATIONS		VLM-650-29 LPT
1	Dimensions	Ø9 x 26 mm (Ø0.354" x 1.024")
2	Operating voltage (Vop)	2.6~6 VDC
3	Operating current (Iop)	Less than 35mA
4	Optical power*	Less than 2mW
5	Laser power output**	Less than 0.39mW
6	Laser class	Class 1M
7	Wavelength at peak emission (λp)	645~665nm
8	Collimating lens	Plastic lens
9	Crosshairs lens	Plastic lens
10	Beam shape	Crosshairs
11	Laser Line width	1mm@40cm
12	Laser line accuracy	80" (± 2mm @5M)
13	Emitting angle	More than 60°
14	Operating temp. range***	+15°C ~+30°C
15	Storage temp. range	-20°C ~+65°C
16	Housing material	Brass
17	Potential housing****	VDD(+)

## VLM-650-29 LPT

18	Electrostatic discharge (ESD)	30KV
19	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.
20	Wire type	1007-26 AWG
21	Cable length	115±15mm
22	Mean time to failure (MTTF) 25°C	5000hrs
23	Application	Economic application
24	Suggestion work distance	0~1 meter / 0~3 feet

\* Optical power is total power output measured at the aperture of the laser.

\*\* According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

\*\*\* Operation temperature 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	Optical power*	Laser power output**	Laser Class	Connection Type
VLM-650-29 LPT	650 nm	Less than 2mW	Less than 0.39mW	Class 1M	Lead Wire

\* Optical power is total power output measured at the aperture of the laser.

\*\* According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

### SAFETY LABEL

**CLASS I LASER PRODUCT**