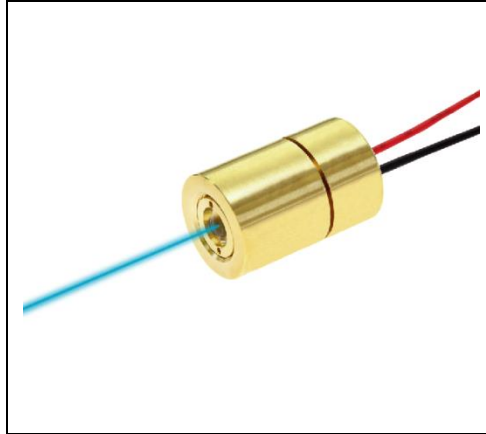


Blue High Power Laser Module

VLM-450-91 LPB



FEATURES:

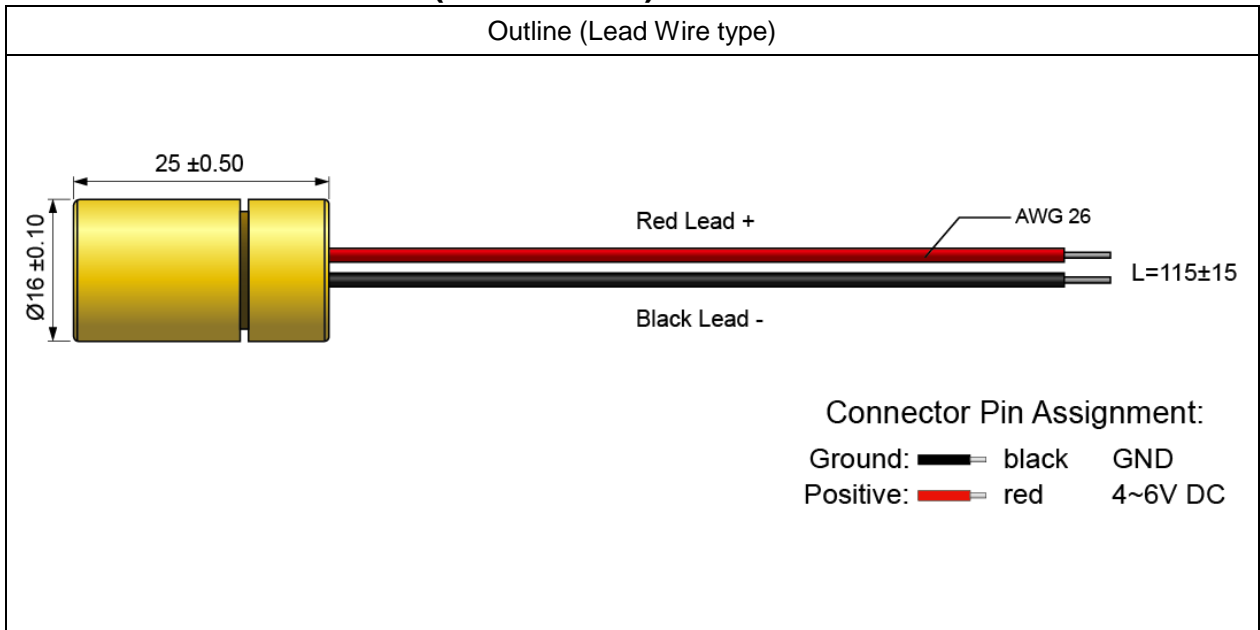
- Blue Laser Diode module to provide large temperature operation range.
- This module has integrated optic, laser diode and APC driver circuit.
- APC driver circuit enables the laser output power safe and constant.
- Aspherical Glass Lens provides tight laser dot.
- Dimensions : Ø16 x 25 mm (Ø0.629" x 0.984")
- Wavelength : 450 nm
- Laser power output: LPB - Class IIIb – 60mW.
- 4~6 VDC operation.
- Connection type : Lead wire

APPLICATIONS:

- Direct Blue Dot Laser Module.
- Special lighting.
- Laser Marking.
- Medical Science application.

VLM-450-91 LPB

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

SPECIFICATIONS		VLM-450-91
		LPB
1	Dimensions	$\varnothing 16 \times 25$ mm ($\varnothing 0.629" \times 0.984"$)
2	Weight	31.5 ± 0.5 g
3	Operating voltage (Vop)	4~6 VDC
4	Operating current (Iop)	Less than 500mA
5	Laser power output	60mW
6	Laser class	Class IIIb
7	Wavelength at peak emission (λ_p)	450nm
8	Collimating lens	Aspherical glass lens
9	Output aperture	5mm
10	Beam shape	Ellipse
11	Beam alignment	Less than 3°
12	Spot Size at 10M	Less than 15mm
13	Operating temp. range*	$-20^\circ\text{C} \sim +60^\circ\text{C}$
14	Storage temp. range	$-20^\circ\text{C} \sim +85^\circ\text{C}$
15	Housing material	Bronze
16	Potential housing**	VDD(+)
17	Electrostatic discharge (ESD)	30KV

VLM-450-91 LPB

18	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.
19	Wire type	1007-26 AWG
20	Cable length	115±15mm
21	Mean time to failure (MTTF) 25°C	10000hrs
22	Application	High power
23	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-450-91 LPB	450 nm	60mW	Class IIIb	Lead Wire

SAFETY LABEL

