

## Ultra-Far Range Laser

### VLM-635/650-18 Series



#### FEATURES:

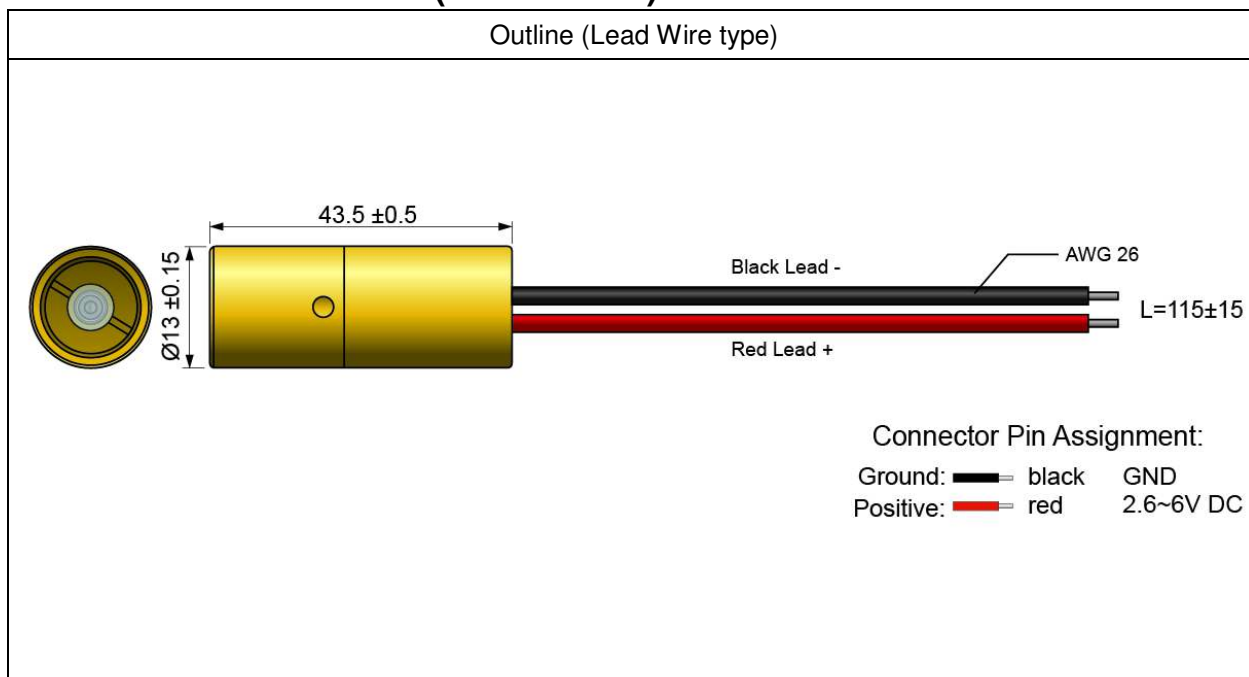
- Ultra-Far Range Dot Laser.
- Diffraction Limited Lens to achieve a near-collimated Laser system, which can be sighted Ultra-Far distance range.
- This module has integrated optic, laser diode, and APC driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- Glass-base hybrid lens provides Ultra-Far range Dot Laser.
- Dimensions:  $\text{Ø}13 \times 43.5 \text{ mm}$  ( $\text{Ø}0.512" \times 1.713"$ )
- Wavelength : 635 nm / 650 nm
- Laser power output : 2.5mW, Class IIIa.
- Beam Divergence: 0.2 mRad.
- 2.6~6 VDC operation.
- Connection type: Lead wire.

#### APPLICATIONS:

- Red Dot Laser-glass aspherical lens with long back focus length function to generate smallest spot at long distances. Ideal use for long distance position, targeting, professional laser sight and security monitor.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

## VLM-635-18 LPA

### OUTLINE DIMENSIONS (UNITS: mm)



### SPECIFICATIONS

SPECIFICATIONS		VLM-635-18 LPA	VLM-650-18 LPA
1	Dimensions	Ø13 x 43.5 mm (Ø0.512" x 1.713")	
2	Operating voltage (Vop)	2.6~6 VDC	
3	Operating current (Iop)	Less than 50mA	
4	Laser power output	2.5±1mW	
5	Laser class	Class IIIa	
6	Wavelength at peak emission (λp)	630~645nm	645~665nm
7	Collimating lens	Glass lens	
8	Output aperture	6mm	
9	Beam shape	Circular	
10	Spot size at 40M	Less than 16mm	
11	Divergence (Half Angle)	0.2 mRad	
12	Beam alignment	Less than 3°	
13	Operating temp. range*	-20°C ~+50°C	
14	Storage temp. range	-40°C ~+70°C	
15	Housing	Brass	
16	Potential housing**	VDD(+)	
17	Electrostatic discharge (ESD)	30KV	

## VLM-635-18 LPA

18	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	
19	Wire type	1007-26AWG	
20	Cable length	115±15mm	
21	Mean time to failure (MTTF) 25°C	5000hrs	10000hrs
22	Application	Long range application	
23	Suggestion work distance	10~200 meters / 30~600 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-635-18 LPA	635 nm	2.5mW	Class IIIa	Lead Wire
VLM-650-18 LPA	650 nm	2.5mW	Class IIIa	Lead Wire

### SAFETY LABEL

