



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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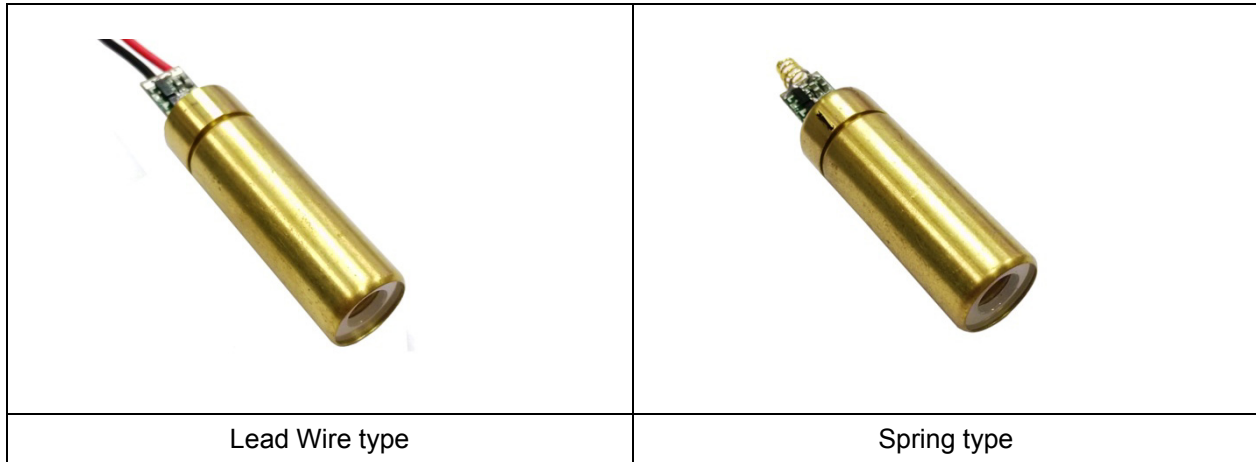
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## Small Spot Laser

### VLM-635/650-12 Series



#### FEATURES:

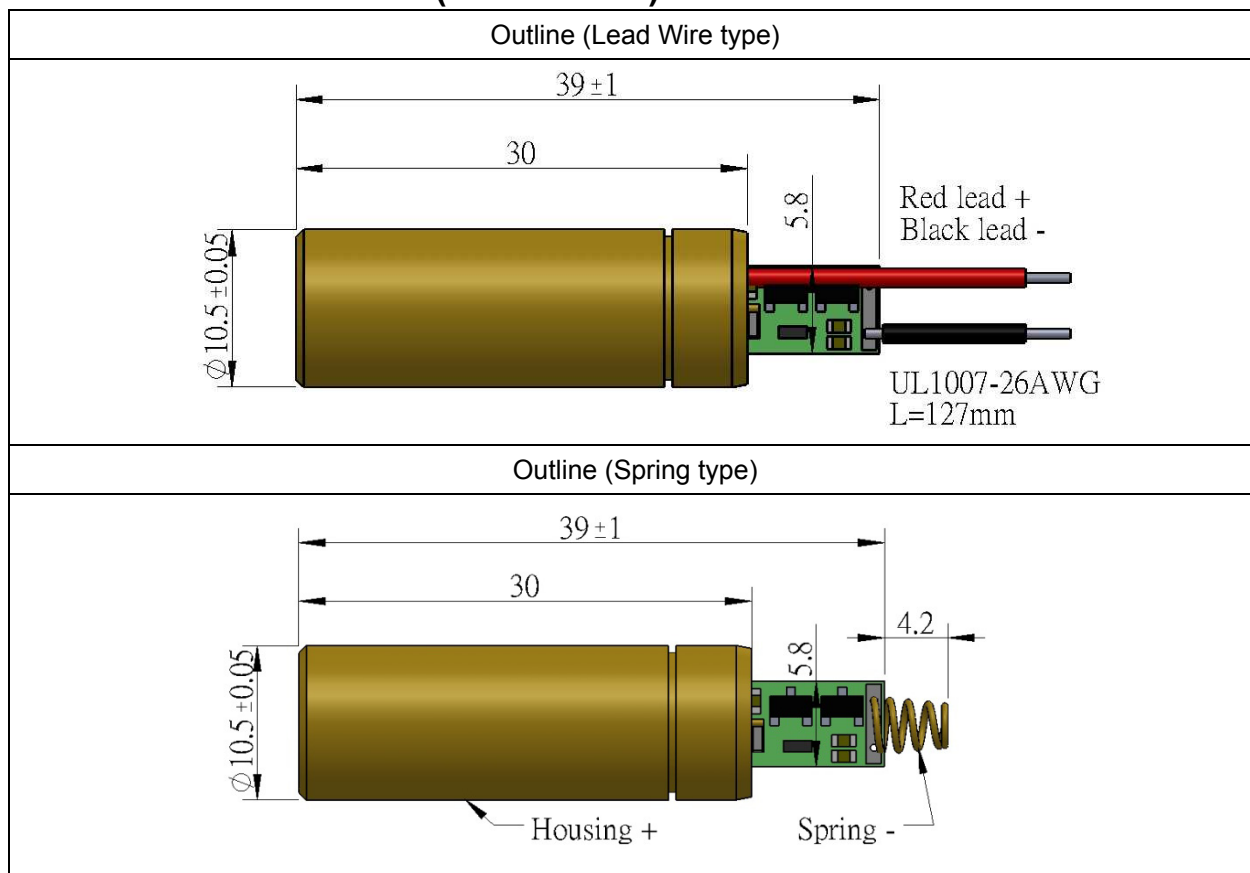
- Red Small-Spot Dot Laser.
- Small-Spot Laser module for use with high-precision devices.
- This module has integrated optic, laser diode, and APC driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- High-Accuracy Aspherical Plastic Lens provides Small-Spot Dot Laser.
- Dimensions:  $\Phi 10.5 \times 39$  mm ( $\Phi 0.413" \times 1.535"$ )
- Wavelength : 635 / 650 nm
- Output power : Class II – less than 1mW / Class IIIa – less than 5mW.
- Beam Divergence: 0.25 mRad.
- 2.6~5 VDC operation.
- Connection type: Lead wire / Spring.

#### APPLICATIONS:

- Red Small Spot Dot Laser, smaller laser spot for Industrial high-precision positioning, measuring, alignment, leveling, adjusting, targeting and laser sighting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science

## VLM-635/650-12 Series

### OUTLINE DIMENSIONS (UNITS: mm)



### SPECIFICATIONS

SPECIFICATIONS		635-12	650-12
1	Dimensions	$\Phi 10.5 \times 39$ mm ( $\Phi 0.413" \times 1.535"$ )	
2	Operating voltage (Vop)	2.6~5 VDC	
3	Operating current (Iop)	< 50mA	< 35mA
4	Continuous wave output power (Po)	LPT<1mW / LPA $\leq$ 2.5mW	
5	Wavelength at peak emission ( $\lambda_p$ )	630~645nm	645~665nm
6	Collimating lens	Aspherical Plastic Lens( $\Phi 10$ )	
7	Spot size at 5M / 20M	2.5 $\pm$ 0.5 mm / 10 $\pm$ 1 mm	
8	Divergence (Half Angle)	0.25 mRad	
9	Operating temp. range	+10°C ~+40°C	
10	Storage temp. range	-20°C ~+65°C	
11	Housing	Brass	
12	Mean time to failure (MTTF) 25°C	5000hrs	10000hrs

Note : 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.



## VLM-635/650-11 Series

### ORDER CODE

Order Code	Wavelength	Output Power	Connection Type
VLM-635-12 LPA	635 nm	≤ 2.5mW	Lead Wire
VLM-635-12 LPT	635 nm	< 1mW	Lead Wire
VLM-635-12 SPA	635 nm	≤ 2.5mW	Spring
VLM-635-12 SPT	635 nm	< 1mW	Spring
VLM-650-12 LPA	650 nm	≤ 2.5mW	Lead Wire
VLM-650-12 LPT	650 nm	< 1mW	Lead Wire
VLM-650-12 SPA	650 nm	≤ 2.5mW	Spring
VLM-650-12 SPT	650 nm	< 1mW	Spring

### SAFETY LABEL

