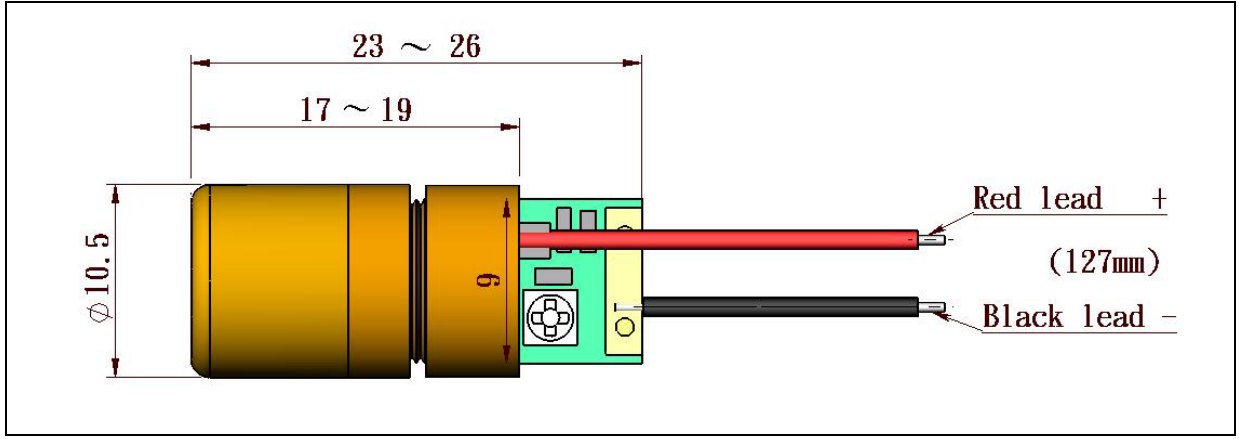


# MODEL TYPE

**VLM-635-02 LPA / VLM-635-02 LPT**  
**VLM-650-02 LPA / VLM-650-02 LPT**

**Adjustable focus Laser**

**OUTLINE DIMENSIONS (UNITS: mm)**



1. Adjustable focus function laser
2. This model integrated optic, laser diode, and the APC driver circuit into a patented solid brass structure for the best shock resistance and heat sink consideration.
3. Options: Connection type: Spring / Lead wire (Spring type: by order).  
 Output power: Class II-less than 1mW / Class IIIa – less than 5mW.
4. E.S.D. protection 15KV.

SPECIFICATIONS		635-02	650-02
1	Operating voltage (Vop)	3~5V	
2	Operating current (Iop)	< 50mA	< 35mA
3	Cw output power (Po)	$\leq 3\text{mW}$	
4	Wavelength at peak emission ( $\lambda_p$ )	630 ~ 645nm	645 ~ 665nm
5	Collimating lens	Aspherical plastic ( $\phi 7$ )	
6	Spot size at 5M	$5 \pm 1$ mm	
7	Divergence	1.0 mrad	
8	Operating temp. range	$+10^\circ\text{C} \sim +40^\circ\text{C}$	
9	Storage temp. range	$-20^\circ\text{C} \sim +65^\circ\text{C}$	
10	Housing	Brass	
11	Mean time to failure (MTTF) 2.5mW 25°C	5000hrs	10000hrs