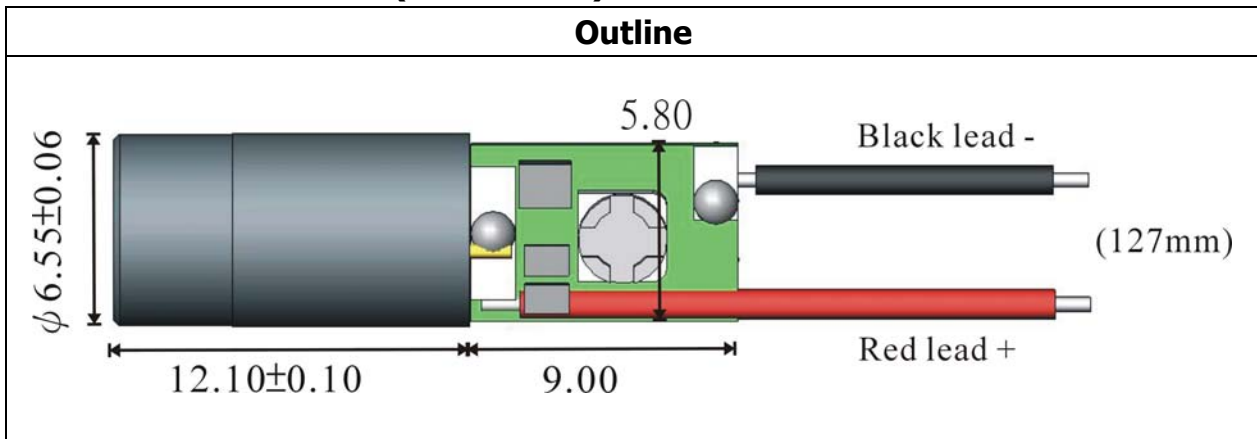


# MODEL TYPE

**VLM-635-04 LPA / VLM-635-04 LPT**  
**VLM-650-04 LPA / VLM-650-04 LPT**

**Economic solution Laser**

## OUTLINE DIMENSIONS (UNITS: mm)



1. Economic solution for general laser pointer application.
2. This model integrated optic, laser diode, and the APC driver circuit .
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		635-04	650-04
1	Operating voltage (Vop)	3~5V	
2	Operating current (Iop)	< 45mA	< 25mA
3	Cw output power (Po)	$\leq 2.5\text{mW}$	
4	Wavelength at peak emission ( $\lambda_p$ )	630~645nm	645~665nm
5	Collimating lens	Aspherical plastic ( $\phi 5$ )	
6	Spot size at 5M	$6 \pm 1$ mm	
7	Divergence	1.2 mrad	
8	Operating temp. range	+15°C ~ +30°C (Room Temperature)	
9	Storage temp. range	-20°C ~ +65°C	
10	Housing	Zinc alloy	
11	Mean time to failure (MTTF) 2.5mW 25°C	5000hrs	2000hrs