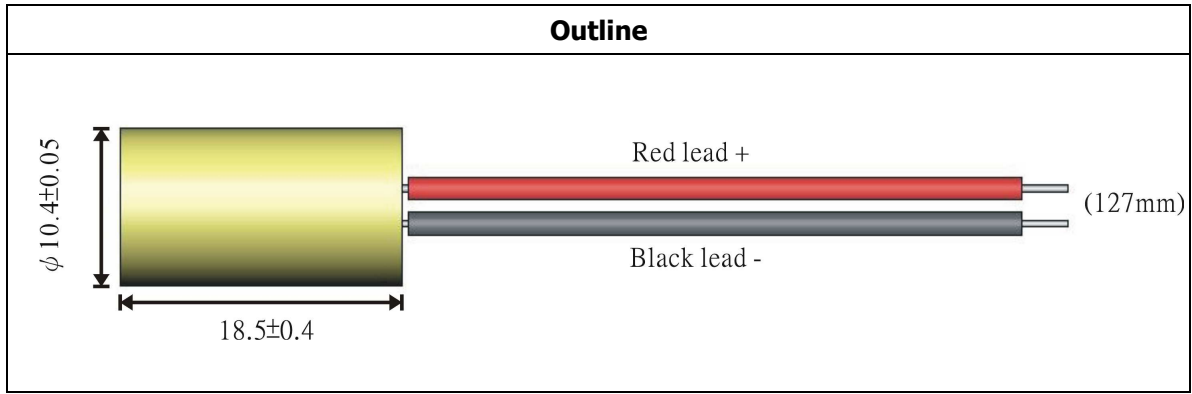


# MODEL TYPE

## VLM-635-01 LPA / VLM-635-01 LPT Industrial use Laser

## VLM-650-01 LPA / VLM-650-01 LPT

### OUTLINE DIMENSIONS (UNITS: mm)



1. Basic model, compact size with PCB inside ,ideal for industrial laser indication
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 |   | 635-01                          | 650-01    |
|----------------|---|---------------------------------|-----------|
| 1              | Operating voltage (Vop)                     | 3~5V                            |           |
| 2              | Operating current (Iop)                     | < 50mA                          | < 35mA    |
| 3              | Cw output power (Po)                        | $\leq 3$ 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°C ~+40°C                    |           |
| 9              | Storage temp. range                         | -20°C ~+65°C                    |           |
| 10             | Housing                                     | Brass                           |           |
| 11             | Mean time to failure (MTTF) 25°C            | 5000hrs                         | 10000hrs  |