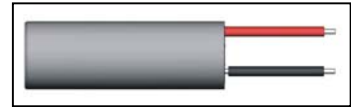




## VLM650-03-LPT



### TECHNICAL DATA

### Red diode laser module

VLM650-03-LPT is a multi purpose small size red diode laser module featuring a fixfocus acrylic lens, with integrated APC circuitry for long time stable operation

#### Features

- Small size (Ø 7.0 x 22.5 mm)
- Fixfocus acrylic lens
- APC (auto power control)
- Low current consumption
- E.S.D. protection 15 KV
- **Laser class II**

#### Absolute Maximum Ratings ( $T_C=25^\circ\text{C}$ )

| Item                  | Symbol    | Value       | Unit             |
|-----------------------|-----------|-------------|------------------|
| Power Supply Voltage  | $V_{CC}$  | 3 ... 5     | V                |
| Output Power          | $P_O$     | <1          | mW               |
| Operating Temperature | $T_C$     | -20 ... +50 | $^\circ\text{C}$ |
| Storage Temperature   | $T_{stg}$ | -40 ... +70 | $^\circ\text{C}$ |

#### Specifications ( $T_C=25^\circ\text{C}$ , $P_o<5\text{mW}$ , $V_{CC}=6\text{V}$ )

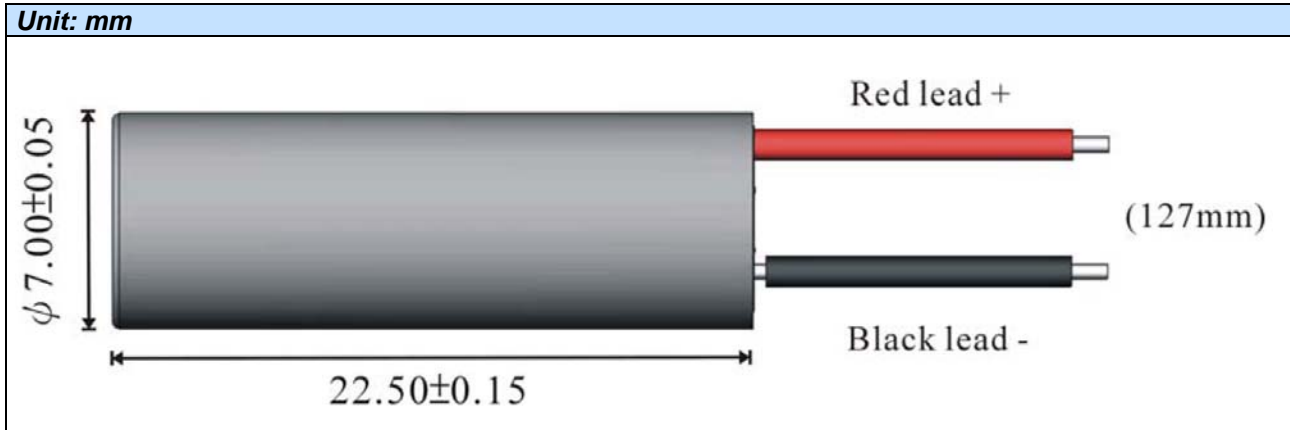
|                               | Min.                       | Typ. | Max. | Unit |
|-------------------------------|----------------------------|------|------|------|
| <b>Optical</b>                |                            |      |      |      |
| Center Wavelength $\lambda_c$ | 645                        | 650  | 665  | nm   |
| Output Power                  | -                          | -    | 1.0  | mW   |
| Divergence angle              | 1.2                        |      |      | mrad |
| Beam Size at 5M               | 6 ±1                       |      |      | mm   |
| <b>Electrical</b>             |                            |      |      |      |
| Current draw                  | -                          | -    | 25   | mA   |
| Supply voltage                | 3.0                        | -    | 5.0  | V    |
| <b>General</b>                |                            |      |      |      |
| Body                          | Steel                      |      |      |      |
| Dimensions                    | 7.0 x 22.5                 |      |      | mm   |
| Lens                          | Aspherical acrylic, Ø 5 mm |      |      |      |
| Mean time to failure (MTTF)   | 2000                       |      |      | h    |

The above specifications are for reference purpose only and subjected to change without prior notice





## Outline Dimension :



## Cautions

1. Do not operate the device above the maximum rating condition, even momentarily. It may cause unexpected permanent damage to the device.
2. Semiconductor laser device is very sensitive to electrostatic discharge. High voltage spike current may change the characteristics of the device, or malfunction at any time during its service period. Therefore, proper measures for preventing electrostatic discharge are strongly recommended.
3. Do not look into the laser beam directly with the naked eyes. The laser beam may cause severe damage to human eyes.

