



## RLDE635-10-3

- Red Diode Laser Module
- 635 nm, 10 mW
- Focus Adjustable
- Dimension:  $\varnothing 14 \times 45$  mm



### Description

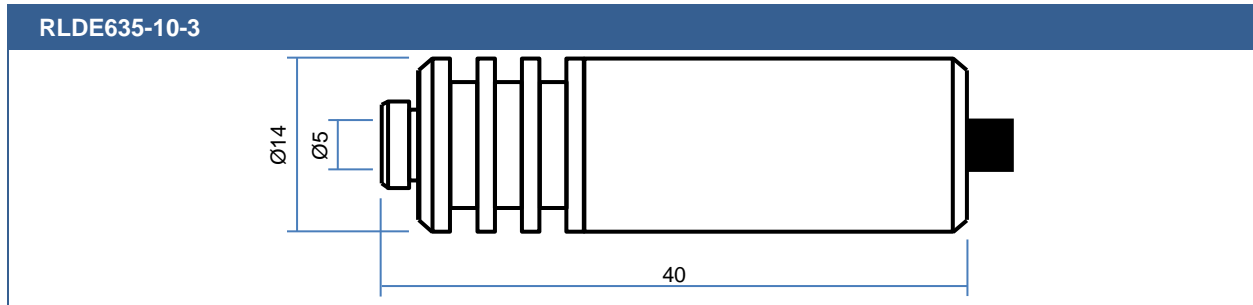
RLDE635 series of Diode Laser Modules have been designed with emphasis on **superior beam quality**, and **reliable operation**. The modules body is made of black anodized aluminum, enclosing laser diode, lens, and driving electronics. RLDE635 series features a **focusable glass lens optic** with a locking mechanism. The supply voltage is specified as **3 VDC**.

### Specifications

| Parameter                   | Min.   | Values<br>Typ.                   | Max. | Unit  |
|-----------------------------|--------|----------------------------------|------|-------|
| Peak Wavelength             |        | 635                              |      | nm    |
| Optical Output Power        |        | 10                               |      | mW    |
| Laser Class                 |        | 3B                               |      |       |
| Operating Voltage           |        | DC 3                             |      | V     |
| Operating Current           |        |                                  | 80   | mA    |
| Control                     |        | APC                              |      |       |
| Standard Operating Distance |        | 10                               |      | m     |
| Focus                       |        | adjustable                       |      |       |
| Beam Character              |        | elliptical                       |      |       |
| Elliptic Proportion         |        | 1:1.7                            |      |       |
| Beam size                   | @ 1 m  | 1                                |      | mm    |
|                             | @ 20 m | 6 x 11                           |      |       |
|                             | @ 40 m | 12 x 20                          |      |       |
| Output Aperture             |        | $\varnothing 5$                  |      | mm    |
| Divergence                  |        | 0.6                              |      | mrad  |
| Optic                       |        | glass lens, both sides AR coated |      |       |
| Operating Temperature       | -10    |                                  | +40  | °C    |
| Storage Temperature         | -40    |                                  | +80  | °C    |
| Life Time                   | 8000   |                                  |      | hours |
| Material                    |        | black anodized aluminum          |      |       |
| Electrical Connection       |        | connector plug                   |      |       |
| Dimension (Dia. x W)        |        | $\varnothing 14 \times 45$       |      | mm    |
| Weight                      |        |                                  |      | g     |



## Outline Dimensions



All Dimensions in mm

## Electrical Connection



## Precautions

### Mounting Instruction:

In order to maintain lifetime and stability of the laser diode it is essential to provide efficient heat management. For long time stable operation, proper contact between laser module and heat sink is mandatory.

### Safety Advice:

This laser module emits highly concentrated visible light, which can be **hazardous to the human eye and skin**. It is classified as **CLASS 3B laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**. Actual laser light emitted and precautions necessary strongly depend on mode of operation.