

**Part No: LR-0.4-650**



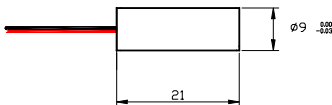
## Product Features

- High Stability and low noise
- Round Collimated Beam
- Reverse Polarity Protection
- Low Cost

## Application

- Measurement
- Automation
- Alignment

## Mechanical Drawing



### Operational Hazard-Semiconductor Laser Diode Module:

This laser module emits radiation that is visible and harmful to human eye. When in use, do not look directly into the laser emitting aperture. Direct viewing of laser diode emission at close range may cause eye damage.

**Limited Warranty:** One year. No warranty coverage for disassembly, modifications or damage due to abuse or misapplication.

## Specification

### OPTICAL

|                               |                        |
|-------------------------------|------------------------|
| Wavelength                    | 650 nm                 |
| Optical Output Power          | 0.4 mW                 |
| Stability                     | <1%                    |
| Wavelength Drift              | 0.2nm/°C               |
| Laser Class                   | Class I (EIC-European) |
| Laser Operation               | Continuous             |
| Laser Structure               | Single Mode Laser      |
| Divergence at the collimation | 2 milliradian          |
| Spot Size                     | 3 mm round beam        |

### ELECTRICAL

|                        |                    |
|------------------------|--------------------|
| Operating Voltage      | 3 to 5 VDC         |
| Operating Current      | < 60 mA            |
| Control Circuit        | Auto Power Control |
| Electrical Connections | +Red, -Black       |

### MECHANICAL

|                         |                              |
|-------------------------|------------------------------|
| Dimension               | 9mm(D)x 21mm (L)             |
| Cable                   | 380 mm                       |
| Operating Temperature   | -10°C to +50°C               |
| Storage Temperature     | -40°C to +80°C               |
| Heat Sink Requirements* | Recommended for extended use |

### Notes

\* Heat Sink: The LR Series Laser Module is designed to operate without heat sink. Do not restrict air circulation around the device; an additional heat sink can be used to maximize the performance and life time of the laser.



Complies with CDRH 21CFR 1040.10