

# UT Series Red Laser Diode Module



Part No: UT5-7G-650



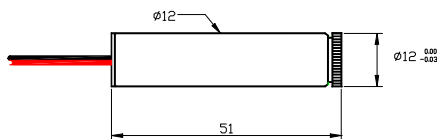
## Product Features

- High Stability and low noise
- Collimated or Adjustable focus beam
- Reverse Polarity Protection
- 1 MHz Modulation

## Applications

- Measurement
- Bioanalytical
- Automation
- Alignment

## Mechanical Drawing



**Operational Hazard-Semiconductor Laser Diode Module:** This laser module emits radiation that is invisible 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 misapplications

## Specifications

### OPTICAL

Wavelength	650 nm
Optical Output Power	7 mW
Stability	<1%
Wavelength Drift	0.2nm/°C
Noise (20MHz Bandwidth)	<0.5% RMS
Laser Class	Class IIIB
Laser Operation	Continuous
Laser Structure	Single Mode Laser
Divergence at collimation	<0.5 milliradian
Spot Size	Adjustable Or Collimated(5mm)
Minimum Spot Size	<120µm at <10" distance
Pointing Stability	<50µrad

### ELECTRICAL

Operating Voltage <sup>1</sup>	3.3 to 5 VDC
Operating Current	<60 mA
Control Circuit	Auto Power Control
Electrical Connections	+Red, -Black, White (TTL)
TTL Input <sup>1</sup>	Low (0~0.8 V), High (3~5 V)

### MECHANICAL

Dimension	12mm(D)x 51mm (L)
Cable	200mm
Operating Temperature	-10°C to +50°C
Storage Temperature	-40°C to +80°C
Heat Sink Requirements <sup>2</sup>	Recommended for extended use

### Notes

1. For CW Operation: Connect the white wire to the red wire. **TTL voltage should never exceed operating voltage**
  2. Heat Sink: The UT Series Red Laser Diode Module is designed to dissipate heat through its body. Do not use a thermally insulating material for mounting. 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.
- Caution:** The case is internally connected to the circuit; damaging the anodized surface may result in failure of the laser module.



UT5-7G-650 is sold only for use in OEM equipment. The OEM is responsible for compliance with all applicable safety regulations

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