

DATASHEET



FEATURES

- ✓ Adjustable Focus Beam
- ✓ High Stability & Low Noise
- ✓ ESD & Reverse Polarity Protected
- ✓ 1MHz Modulation

APPLICATIONS

- ✓ Measurement
- ✓ Automation
- ✓ Alignment

Operational Hazard of Laser Module

This laser module emits radiation that is visible/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 misapplication.



SPECIFICATIONS

OPTICAL

| | |
|--|--|
| Wavelength | 650 nm |
| Optical Output Power | 3.5 mW |
| Laser Power Stability (with heat sink) | < 1% |
| Wavelength Drift | 0.2nm/°C |
| Laser Class | Class 3R |
| Laser Operation | Continuous |
| Laser Structure | Single Mode Laser |
| Divergence (at collimation) | < 1 mrad |
| Spot Size | Elliptical Adjustable (default) Or Collimated (5mm) at 1m |
| Min Spot Size | < 100 µm at < 10" distance |

ELECTRICAL

| | |
|------------------------|-----------------------------|
| Operating Voltage | 3.3 to 5V DC |
| Operating Current | < 50 mA |
| Control Circuit | Auto Power Control |
| Electrical Connections | + Red, - Black, White (TTL) |
| TTL Input ¹ | Low (0-0.8V), High (3-5V) |

MECHANICAL/ENVIRONMENTAL

| | |
|-------------------------------------|------------------------------|
| Dimension, mm | 12mm (D)X 51mm (L) |
| Cable | 200mm |
| Operating Temperature | +10°C to +50°C |
| Storage Temperature | -40°C to +80°C |
| Heat Sink Requirements ² | Recommended for extended use |

1. For CW Operation connect the white wire to the red wire. TTL voltage should never exceed the operating voltage
2. This laser 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.

Caution: The case is internally connected to the circuit. Damaging the anodized surface may result in failure of the laser module

OUTLINE DRAWING

