

# UCL Series Red Laser Cross Line Module

Part No: UCL5-1G-650-25



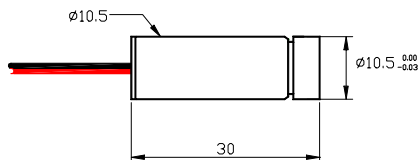
## Product Features

- Perfectly Straight Cross-line
- High Stability and low noise
- Adjustable focus
- Reverse Polarity Protection

## Application

- Measurement
- Targeting
- 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	<1 mW
Stability	<1%
Wavelength Drift	0.2nm/°C
Noise (20MHz Bandwidth)	<0.5% RMS
Laser Class	Class II
Laser Operation	Continuous
Laser Structure	Single Mode Laser
Fan Angle	25° full fan angle
Cross Line Length(L)	0.4433× D (Distance)
Line Thickness	Adjustable
Minimum Line Thickness	<1mm up to 1 meter
Bore sight Accuracy	<2.5mm/m
Pointing Stability	<50μrad

### ELECTRICAL

Operating Voltage <sup>1</sup>	3 to 5 VDC
Operating Current	<60 mA
Control Circuit	Auto Power Control
Electrical Connections	+Red, -Black

### MECHANICAL

Dimension	10.5mm(D)×30mm(L)
Cable	380mm
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. Higher operating voltage version (9 to 12V) is available, the part No. will be: UCL12-1G-650-25, the size will be 10.5mm (D) × 35mm (L).
2. Heat Sink: The UCL Series Red Laser Cross Line 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.

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



Complies with CDRH 21CFR 1040.10