

# FCL Series Red Laser Cross Line Module

Part No: FCL5-1G-650-\*\*



## 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 (depends on fan angle)
Laser Operation	Continuous
Laser Structure	Single Mode Laser
Fan Angle	15° to 60° full fan angle
Line Thickness	Fixed
Minimum Line Thickness	< 2mm up to 3 meter
ELECTRICAL	
Operating Voltage	3 to 5 VDC
Operating Current	<80 mA
Control Circuit	Auto Power Control
Electrical Connections	+Red, -Black
MECHANICAL	
Dimension	20mm(D)×40mm(L)
Cable	200mm
Operating Temperature	-10°C to +50°C
Storage Temperature	-40°C to +80°C
Heat Sink Requirements <sup>1</sup>	Recommended for extended use

### Notes

1. Heat Sink: The FCL 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