

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



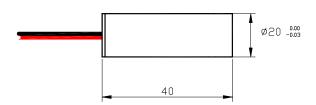
Product Features

- 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		
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	OPTICAL	
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	Wavelength	650 nm
Wavelength Drift Noise (20MHz Bandwidth) 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 Minimum Line Thickness ELECTRICAL	Optical Output Power	1 mW
Noise (20MHz Bandwidth) Laser Class Class II (depends on fan angle) Laser Operation Continuous Laser Structure Fan Angle Line Thickness Minimum Line Thickness ELECTRICAL Class II (depends on fan angle) Continuous Single Mode Laser Fixed Fixed 	Stability	<1%
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 ELECTRICAL	Wavelength Drift	0.2nm/°C
Laser Operation Continuous Laser Structure Single Mode Laser Fan Angle 15° to 60° full fan angle Line Thickness Fixed Minimum Line Thickness ELECTRICAL	Noise (20MHz Bandwidth)	<0.5% RMS
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	Laser Class	Class II
Laser Structure Fan Angle Line Thickness Minimum Line Thickness ELECTRICAL Single Mode Laser 15° to 60° full fan angle Fixed < 2mm up to 3 meter		(depends on fan angle)
Fan Angle 15° to 60° full fan angle Line Thickness Fixed Minimum Line Thickness < 2mm up to 3 meter ELECTRICAL	Laser Operation	Continuous
Line Thickness Fixed Minimum Line Thickness < 2mm up to 3 meter ELECTRICAL	Laser Structure	Single Mode Laser
Minimum Line Thickness < 2mm up to 3 meter ELECTRICAL	Fan Angle	15° to 60° full fan angle
ELECTRICAL	Line Thickness	Fixed
	Minimum Line Thickness	< 2mm up to 3 meter
Operating Voltage 3 to 5 VDC	ELECTRICAL	
	Operating Voltage	3 to 5 VDC
Operating Current <80 mA	Operating Current	<80 mA
Control Circuit Auto Power Control	Control Circuit	Auto Power Control
Electrical Connections +Red, -Black	Electrical Connections	+Red, -Black
MECHANICAL	MECHANICAL	
Dimension 20mm(D)×40mm(L)	Dimension	20mm(D)×40mm(L)
Cable 200mm	Cable	200mm
Operating Temperature -10°C to +50°C	Operating Temperature	-10°C to +50°C
Storage Temperature -40°C to +80°C	Storage Temperature	-40°C to +80°C
Heat Sink Requirements ¹ Recommended for extended use	Heat Sink Requirements ¹	

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