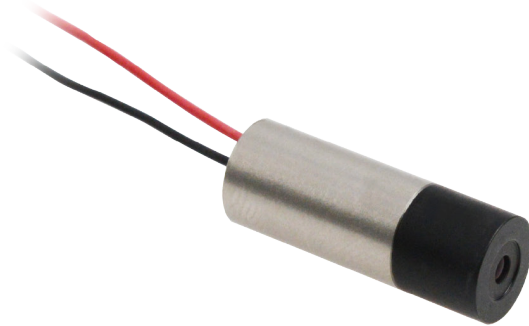


# 4 mW IR LASER DIODE MODULE

**LDM-0850-C-0004-04-99-000-A**

With advanced optics design and packaging capability, Coherent offers a variety of laser diode modules with standard collimated beam output and shaped beam output per request for OEM customers. Wavelength options include 405 nm, 445 nm, 488 nm, 520 nm, 635 nm, 655 nm, and other wavelengths upon request. These laser modules are widely adopted in generic aiming, pointing, biomedical, and machine vision applications.



## FEATURES

- High reliability
- High performance
- Wide operating temperature range
- Mini PCBA integrated for auto power control

## APPLICATIONS

- Laser displays
- Surveying equipment
- Laser alignment & pointing

# 4 mW IR LASER DIODE MODULE

## Product Specifications

Parameter	Min	Typical	Max	Conditions
<b>Optical</b>				
Wavelength	645 nm	650 nm	660 nm	$T_{case} = 25^{\circ}C$
Output Power	3.5 mW	4.2 mW	4.8 mW	$V_{cc} = 3.0 V, T_{case} = 25^{\circ}C$
Beam Divergence (slow axis, $1/e^2$ )	-	0.5 mrad	1.0 mrad	$V_{cc} = 3.0 V, T_{case} = 25^{\circ}C$
Beam Alignment Tolerance (off-axis angle, half-angle)	-	1.0 degree	1.5 degree	$V_{cc} = 3.0 V, T_{case} = 25^{\circ}C$
Operating Temperature (case)	0°C	25°C	60°C	
Optic Material	Glass			
<b>Electrical</b>				
Operating Current	-	20 mA	35 mA	$V_{cc} = 3.0 V, T_{case} = 25^{\circ}C$
Operating Voltage	2.5 V	3.0 V	3.3 V	
<b>Mechanical</b>				
Laser Head Dimensions	Length	-	11.5 mm	-
	Diameter	-	4.15 mm	-
<b>Reliability</b>				
Storage Humidity	-	5%~85% RH	-	Non-condensing
Storage Temperature	-	-40 to +85°C	-	
Shock	1500 g, 0.5 ms, 2 times/axis, 6 times for 3 axes total			
Vibration	0.02 g <sup>2</sup> /Hz, 20~2000 Hz, 1 h/axis, 3 h for 3 axes total			
Expected Lifetime (MTTF)	10,000 h	-	-	$V_{cc} = 3.0 V, T_{case} = 25^{\circ}C$

1The LDM is driven by DC voltage directly with an auto power control PCBA inside.

## Dimensions and Pin Configuration (Unit: mm)

