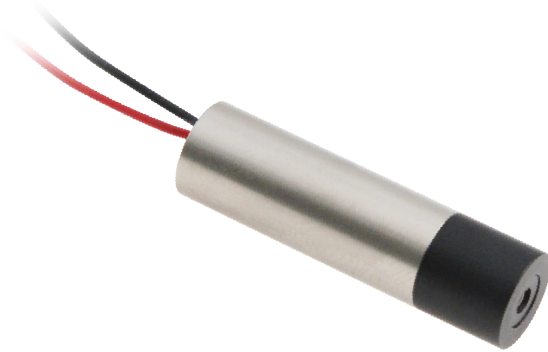


40 mW IR LASER DIODE MODULE

LDM-0850-C-0040-04-99-000-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

40 mW IR LASER DIODE MODULE

Product Specifications

Parameter	Min	Typical	Max	Conditions
Optical				
Wavelength	845 nm	850 nm	855 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			
Electrical				
Operating Current	-	16 mA	39 mA	$V_{cc} = 3.0 V, T_{case} = 25^{\circ}C$
Operating Voltage	2.5 V	3.0 V	3.3 V	
Mechanical				
Laser Head Dimensions	Length	-	20.0 mm	-
	Diameter	-	7.0 mm	-
Reliability				
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 ² /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)

