

II-VI

GDLM-MA-0003-WTA-07-00-A

Wide Operating Temperature Mini Green Laser Module

PRODUCT OVERVIEW

II-VI's GDLM-MA compact green laser module series can operate across a wide temperature range with no TEC required. The mini GDLM is available with an output power of 0.5~50 mW and is suitable for applications such as laser alignment and pointing as well as surveying equipment.

Features

- Mini size
- High reliability
- Automatic power control function
- Low power consumption
- Wide operating temperature range

Applications

- Surveying equipment
- Laser alignment & pointing

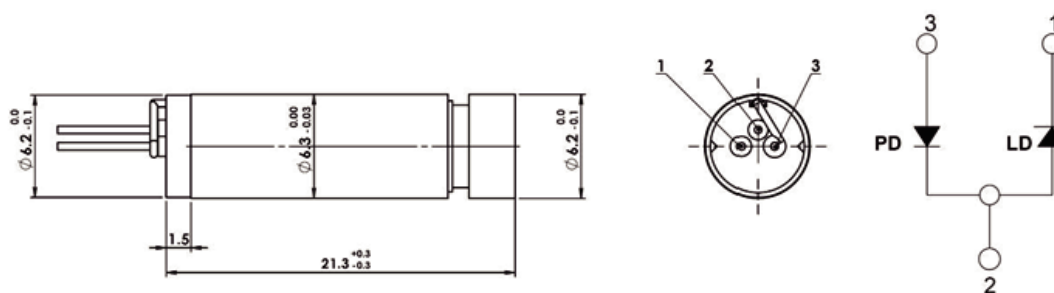
Wide Operating Temperature Mini Green Laser Module

Product Specifications

Parameter	Min	Typical	Max	Conditions
Optical				
Wavelength	531 nm	532 nm	533 nm	
Output Power	3 mW	3.3 mW	3.6 mW	At 25°C
Power Stability	2 h @ constant temp	-	±5%	APC
	Over operating temp range	2 mW	4.5 mW	
Operating Temperature (case)	0~45°C			APC
Residual IR	-	-	1%	
Beam Diameter			60 mm	At 15 m
Beam Divergence	-		2.0 mrad	At 30 m by eye
Roundness	70%	80%	100%	
Warm-Up Time			1 s	0~45°C
Electrical				
LD Working Current	-	240 mA ⁽¹⁾	500 mA	
LD Working Voltage		2.0 V	2.2 V	
Monitor Current	20 µA		200 µA	3.3 mW at 25°C
GDL Power Consumption	-	0.48 W ⁽¹⁾	1.1 W	
Mechanical				
Laser Head Dimensions	Length	21.0 mm	21.3 mm	21.6 mm
	Diameter	6.27 mm		6.3 mm
Beam Alignment Tolerance	Position (Δr)			0.7 mm
	Angle			17.5 mrad
Laser Weight		1.23 g		
Reliability				
Storage Temperature		-40 to 85°C		
Shock	1500 g, 0.5 ms, 6 shocks, 3 axes, 2 shocks/axis			
Vibration	20~2000 Hz, 0.02 g ² /Hz, 3 axes, 1 h/axis			
Expected Lifetime (MTTF)	5000 h	-	-	At rated power & room temp.

⁽¹⁾T_{case} = 25°C; P = 3.3 mW.

Dimensions and Pin Configuration (Unit: mm)



Pin Configurations: 1. LD-; 2. LD+; PD-; 3. PD+ (Green cable)