

## GDL-7050L


**Key Features:**

Mini Size  
 Low Cost  
 Auto Power Control Function  
 High Reliability

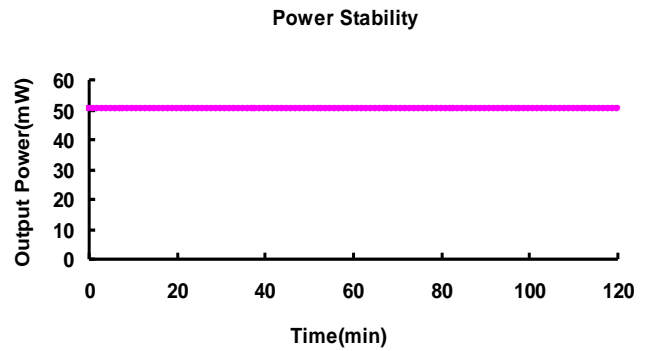
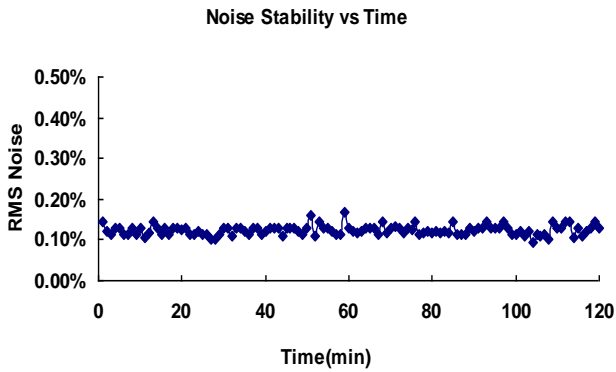
**Applications:**

Biotechnology  
 Laser Display  
 Laser Printing  
 Surveying Equipments

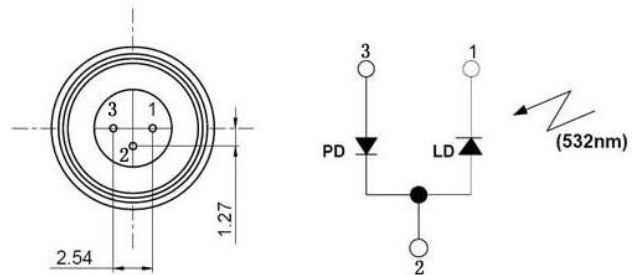
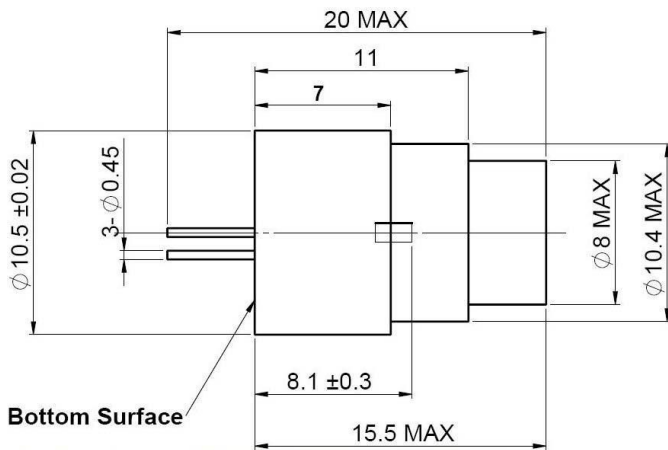
Model Number		GDL-7050L			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		40mW	50mW	60mW	
Power Stability	2hours @ Constant Temp	-	+/-2%	+/-5%	APC
Operating Temperature (Case)		-	20~35°C <sup>①</sup>	-	
Residual IR		-	-	1%	
Beam Diameter		-	0.1mm	-	At output window
Beam Divergence		-	8mrad	10.5mrad	Full angle, 1/e <sup>2</sup>
Roundness		90%	95%	100%	
M-Square		-	1.1	1.2	
RMS Noise(20Hz~20MHz)		-	0.30%	0.50%	At recommended temperature
Polarization Extinction Ratio		100:1	-	-	
Electrical Parameters					
LD Working Current		-	350mA	600mA	
LD Working Voltage		-	2.0V	2.3V	
Monitor Current		200uA	400uA	700uA	50mW at recommended temperature
GDL Power Consumption		-	0.7W	1.38W	
Mechanical Parameters					
Laser Head Dimensions	Length	-	-	15.5mm	
	Diameter	10.48mm	10.50mm	10.52mm	
Beam Alignment Tolerance	Position( $\Delta r$ )	-	0.1mm	0.3mm	
	Angle	-	7mrad	15mrad	
Laser Weight		-	3.3g	-	
Reliability					
Operating Humidity		-	5%~85% R.H.	-	
Storage Temperature		-	-40 to +85 °C	-	
Shock		-	1500g, 0.5ms, 6 shocks	-	3 axes, 2 shocks/axis
Vibration		-	20~2000Hz, 0.02g <sup>2</sup> /Hz	-	3 axes, 1hr/axis
Expected Lifetime (MTTF)		10000hrs	-	-	

Note: <sup>①</sup>Recommended temperature

## Typical Output Performance



## Dimensions and Pin Configuration (Unit: mm)



Pin Configuration : 1. LD Cathode 2. COM\* 3. PD Anode  
Note: \* LD Anode and PD Cathode