

GDL-7020L


Key Features:

Mini Size
 Low Cost
 Auto Power Control Function
 High Reliability

Applications:

Biotechnology
 Laser Display
 Laser Printing
 Surveying Equipments

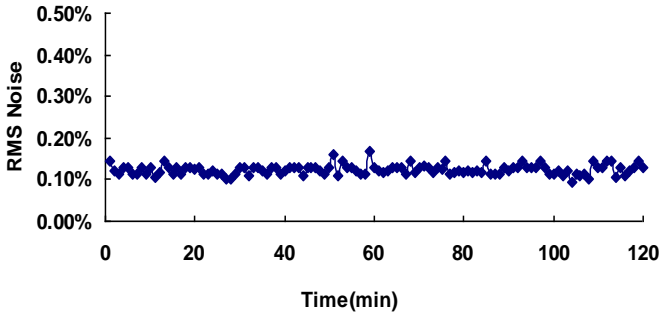
Model Number		GDL-7020L			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		16mW	20mW	24mW	
Power Stability		-	+/-2%	+/-5%	APC, 2hours @ Constant Temp
Operating Temperature (Case)		Recommended temperature of data sheet			
Residual IR		-	-	1%	
Beam Diameter		-	0.1mm	-	At output window
Beam Divergence		-	7mrad	9.5mrad	Full angle, $1/e^2$
Roundness		90%	95%	100%	
M-Square		-	1.1	1.2	
RMS Noise(20Hz~4MHz)		-	0.30%	0.50%	At recommended temperature
Polarization Extinction Ratio		100:1	-	-	
Electrical Parameters					
LD Working Current		-	300mA ^①	600mA	
LD Working Voltage		-	2.0V	2.3V	
Monitor Current		80uA	150uA	280uA	20mW at recommended temperature
GDL Power Consumption		-	0.6W	1.38W	
Mechanical Parameters					
Laser Head Dimensions	Length	-	-	15.5mm	
	Diameter	10.48mm	10.50mm	10.52mm	
Beam Alignment Tolerance	Position(Δr)	-	0.1mm	0.3mm	
	Angle	-	7mrad	15mrad	
Laser Weight		-	3.3g	-	
Reliability					
Storage Humidity		-	5%~85% R.H. ^②	-	
Storage Temperature		-	-40 to +85 °C	-	
Shock		1500g, 0.5ms, 6 shocks, 3 axes, 2 shocks/axis			
Vibration		20~2000Hz, 0.02g ² /Hz, 3 axes, 1hr/axis			
Expected Lifetime (MTTF)		10000hrs	-	-	@Rated Power& Room Temp

 Note: ^①T_{case}=25°C & P=20mW.

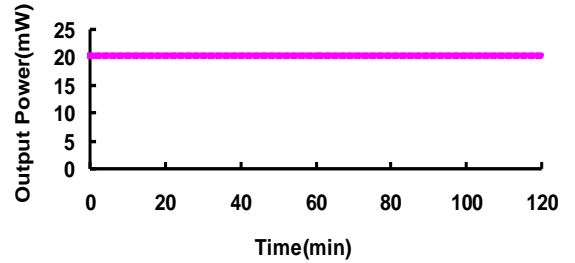
^②Non-condensing

Typical Output Performance

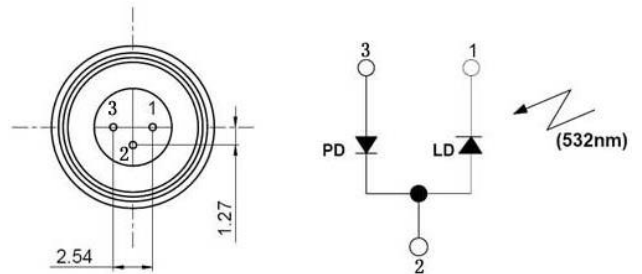
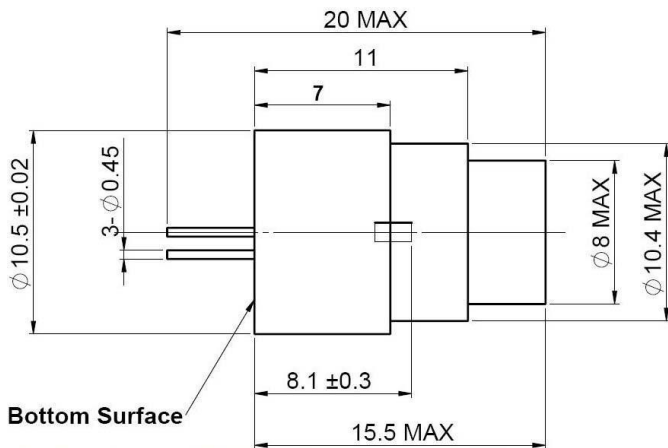
Noise Stability vs Time



Power Stability



Dimensions and Pin Configuration (Unit: mm)



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