

## GDL-7010


**Key Features:**

Mini Size  
 Low Cost  
 Auto Power Control Function  
 High Reliability

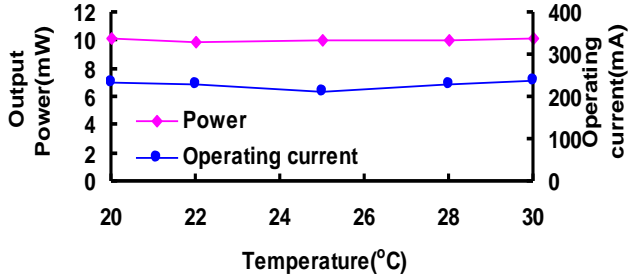
**Applications:**

Laser Display  
 Surveying Equipment  
 Laser Alignment & Pointing

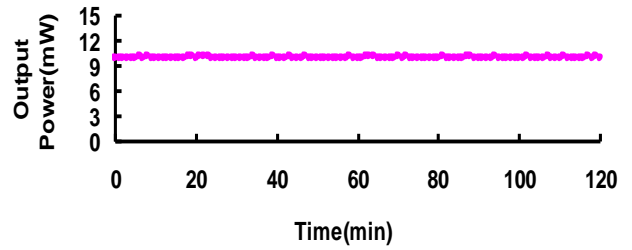
Model Number		GDL-7010			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		8mW	10mW	12mW	
Power Stability	2hours @ Constant Temp	-	+/-2%	+/-5%	APC
	Over Operating Temp Range	-	+/-10%	+/-20%	
Operating Temperature (Case)		20~+30 °C	-	-	APC
Residual IR		-	-	0.5%	
Beam Diameter		-	0.1mm	-	At output window
Beam Divergence		-	5.2mrad	7.2mrad	Full angle, 1/e <sup>2</sup>
Roundness		80%	85%	100%	
M-Square		-	1.2	1.4	
<b>Electrical Parameters</b>					
LD Working Current		-	250mA	400mA	
LD Working Voltage		-	1.9V	2.3V	
Monitor Current		40uA	85uA	140uA	10mW @ 25 °C
GDL Power Consumption		-	0.48W	0.92W	
<b>Mechanical Parameters</b>					
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	Optional
Laser Weight		-	3.3g	-	
<b>Reliability</b>					
Operating Humidity		-	5%~85% R.H.	-	
Storage Temperature		-	-40 to +80 °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)		5000hrs	-	-	Room temperature

## Typical Output Performance

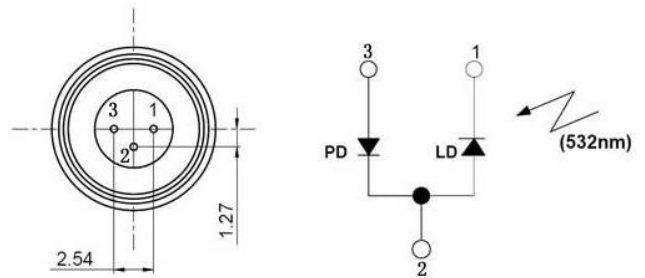
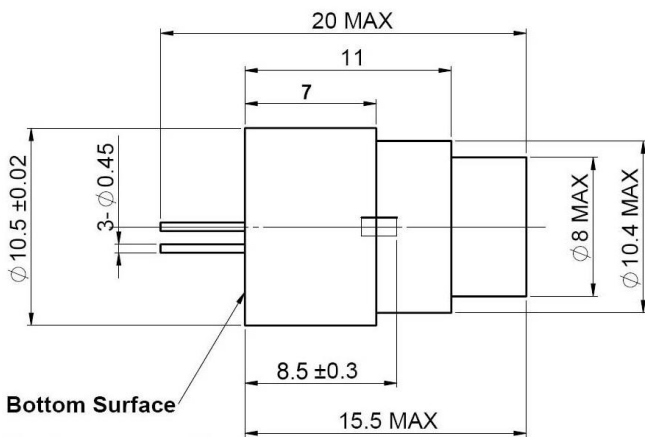
Power & Operating current vs Temperature



Power Stability



## Dimensions and Pin Configuration (Unit: mm)



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