II-VI Suwtech, Inc.
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GDL-7-0010-LN0-00-A

Key Features:
- Mini Size
- Low Cost
- Auto Power Control Function
- High Reliability

Applications:
- Biotechnology
- Laser Display
- Laser Printing
- Surveying Equipments

Model Number		**GDL-7-0010-LN0-00-A**			
Optical Parameters		**Specs**			**Conditions**
		Min	**Typ**	**Max**	
Wavelength		531nm	532nm	533nm	
Output Power		8mW	10mW	12mW	
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	9mrad	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		-	300mA①	600mA	
LD Working Voltage		-	2.0V	2.3V	
Monitor Current		40uA	85uA	140uA	8mW 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	-	-	@10mW & 25 °C

Note: ①Tcase=25°C & P=10mW.
②Non-condensing

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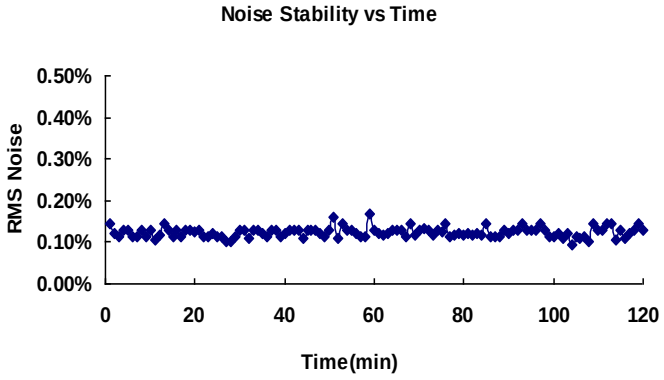
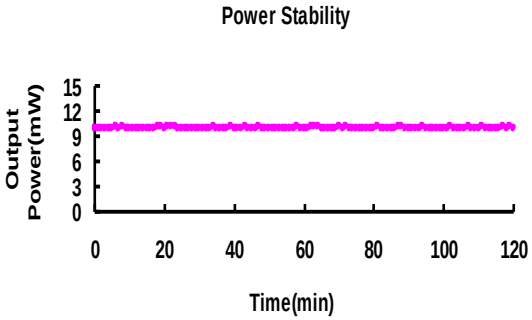
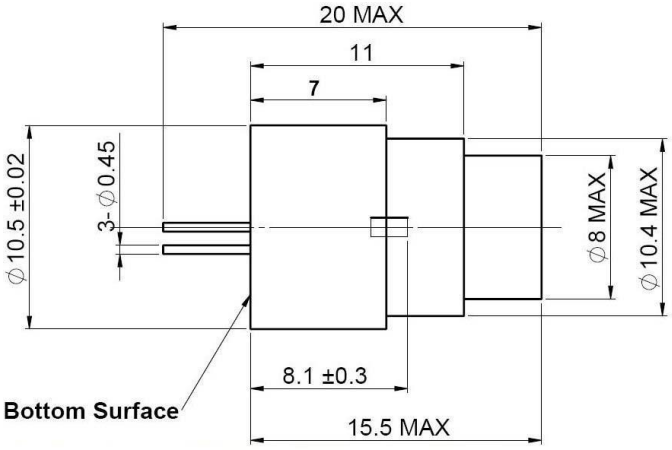
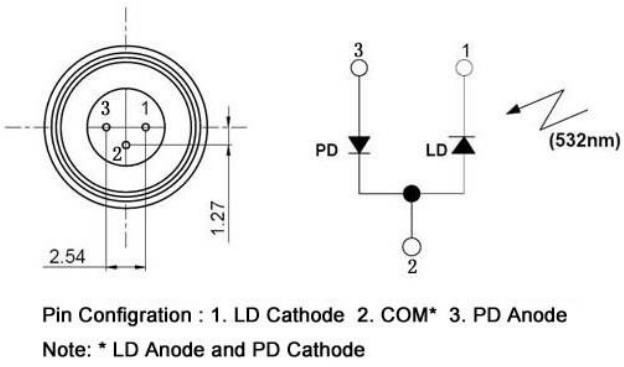
Typical Output Performance





Dimensions and Pin Configuration (Unit: mm)





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