II-VI Suwtech, Inc.
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GDL-7050

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

Applications:
Laser Display
Surveying Equipment
Laser Alignment & Pointing

Model Number		**GDL-7050**			
Optical Parameters		**Specs**			**Conditions**
		Min	**Typ**	**Max**	
Wavelength		531nm	532nm	533nm	
Output Power		40mW	50mW	60mW	
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		-	7mrad	9mrad	Full angle, $1/e^2$
Roundness		80%	85%	100%	
M-Square		-	1.2	1.4	
Electrical Parameters					
LD Working Current		-	330mA①	600mA	
LD Working Voltage		-	2.0V	2.3V	
Monitor Current		200uA	400uA	700uA	50mW @ 25 °C
GDL Power Consumption		-	0.65W	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	Optional
Laser Weight		-	3.3g	-	
Reliability					
Storage Humidity		-	5%~85% R.H.②	-	
Storage Temperature		-	-40 to +80 °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)		5000hrs	-	-	@50mW @ 25 °C

Note: ①Tcase=25°C & P=50mW.
②Non-condensing

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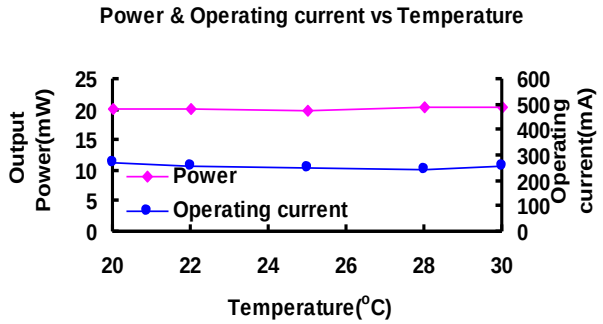
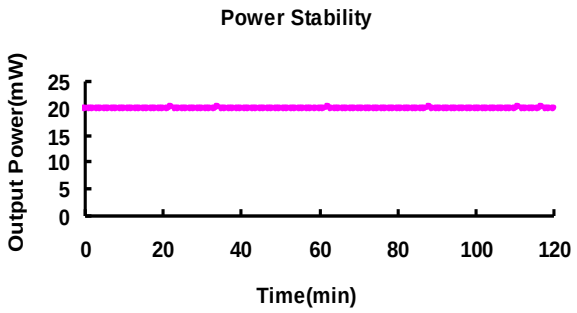
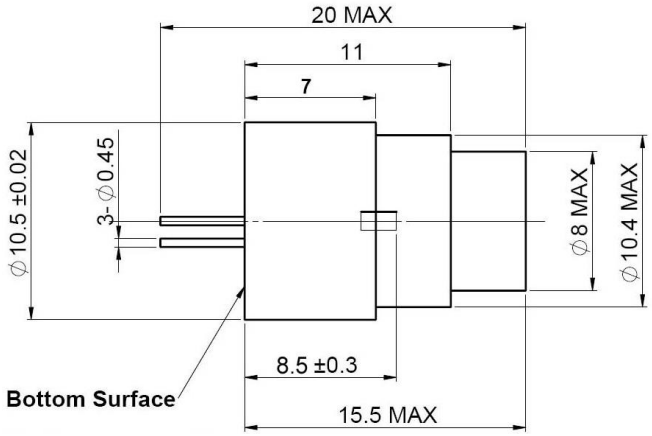
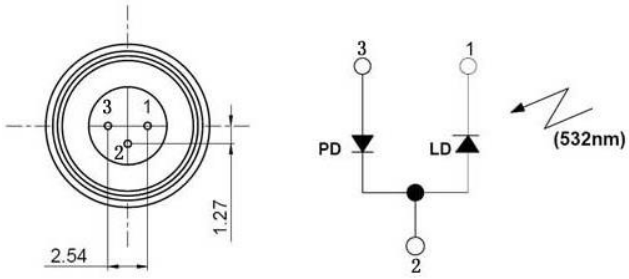
Typical Output Performance





Dimensions and Pin Configuration (Unit: mm)





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