

GDL-7020



Key Features:

Mini Size
Low Cost
Auto Power Control Function
High Reliability

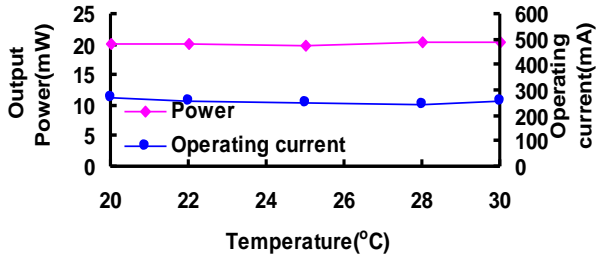
Applications:

Laser Display
Surveying Equipment
Laser Alignment & Pointing

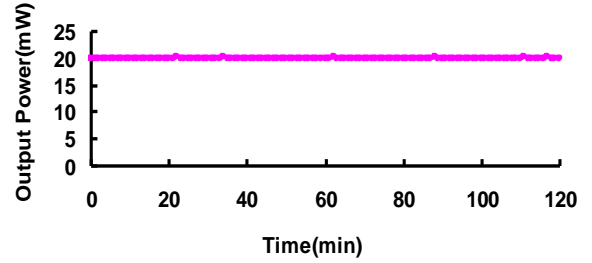
Model Number		GDL-7020			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		16mW	20mW	24mW	
Power Stability	2hours @ Constant Temp	-	+/-2%	+/-5%	APC
	Over Operating Temp Range	-	+/-10%	+/-20%	
Operating Temperature (Case)		20~+30 °C	-	-	APC
Residual IR		-	-	0.5%	
Beam Diameter		-	0.1mm	-	At output window
Beam Divergence		-	5.5mrad	7.5mrad	Full angle, 1/e ²
Roundness		80%	85%	100%	
M-Square		-	1.2	1.4	
Electrical Parameters					
LD Working Current		-	270mA	600mA	
LD Working Voltage		-	2.0V	2.3V	
Monitor Current		80uA	150uA	280uA	20mW @ 25 °C
GDL Power Consumption		-	0.53W	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					
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 ² /Hz	-	3 axes, 1hr/axis
Expected Lifetime (MTTF)		5000hrs	-	-	Room temperature

Typical Output Performance

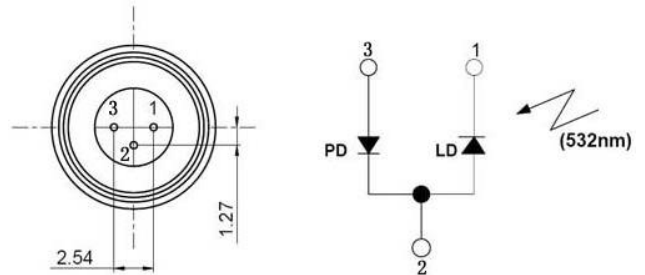
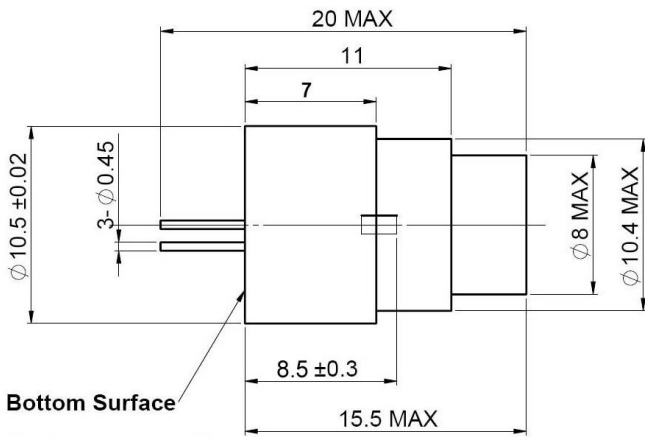
Power & Operating current vs Temperature



Power Stability



Dimensions and Pin Configuration (Unit: mm)



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

Note: * LD Anode and PD Cathode