

GDL-A020



Key Features:

High Reliability
 Compactable size
 Auto Power Control
 Low Power Consumption
 Wide Operating Temperature

Applications:

Laser Display
 Surveying Equipment
 Laser Alignment & Pointing

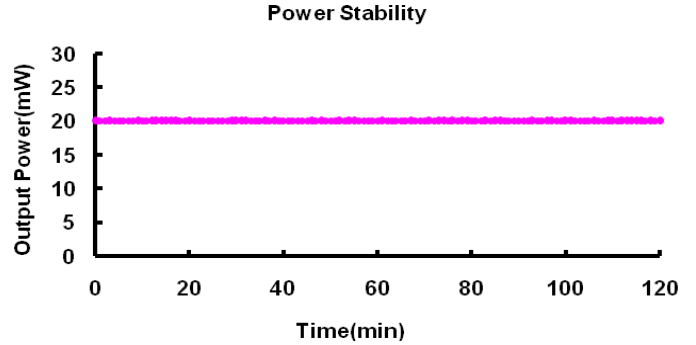
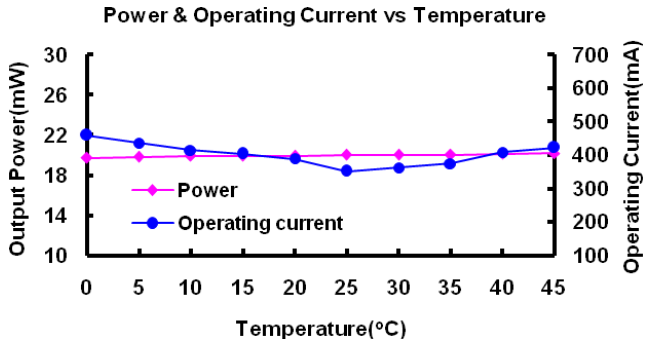
Model Number		GDL-A020			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		19mW	20mW ^①	21mW	At 25 °C
Power Stability	2hours @ Constant Temp	-	-	+/-5%	APC
	Over Operating Temp Range	-	-	+/-25%	
Operating Temperature (Case)		10~+40 °C	0~+45 °C	-	APC
Residual IR		-	-	1%	
Beam Diameter		-	-	0.2mm	At output window
Beam Divergence		-	6.6mrad	8.6mrad	Full angle, 1/e ²
Roundness		70%	80%	100%	
M-Square		-	1.2	1.4	
Electrical Parameters					
LD Working Current		-	380mA ^②	700mA	0~45 °C
LD Working Voltage		1.6V	1.9V	2.2V	
Monitor Current		50uA	-	300uA	
GDL Power Consumption		-	0.73W ^③	1.54W	0~45 °C
Mechanical Parameters					
Laser Head Dimensions	Length	17.4mm	17.6mm	17.8mm	
	Diameter	10.4mm	10.5mm	10.6mm	
Beam Alignment Tolerance	Position(Δr)	-	0.3mm	0.5mm	
	Angle	-	7mrad	17.5mrad	
Laser Weight		-	6.4g	-	
Reliability					
Operating Humidity		-	5%~85% R.H.	-	
Storage Temperature		-	-20 to +60 °C	-	
Shock		-	1000g, 1ms, 6 shocks	-	3 axes, 2 shocks/axis
Vibration		-	20~2000Hz, 0.02g ² /Hz	-	3 axes, 1hr/axis
Expected Lifetime (MTTF)		5000hrs	-	-	Room temperature

Note: ^①10~30mW is optional

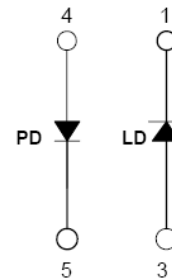
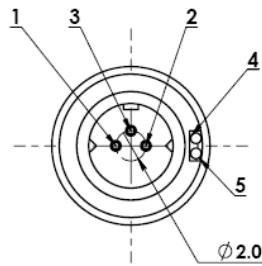
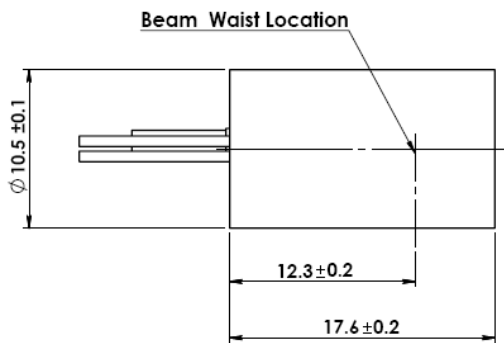
^②20mW at 25 °C

③ 20mW at 25 °C

Typical Output Performance



Dimensions and Pin Configuration (Unit: mm)



Pin Configurations : 1. LD- 2. None 3. LD+
4. PD+ 5. PD-