

## GDLM-A020


**Key Features:**

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

**Applications:**

Surveying Equipment  
 Laser Alignment & Pointing

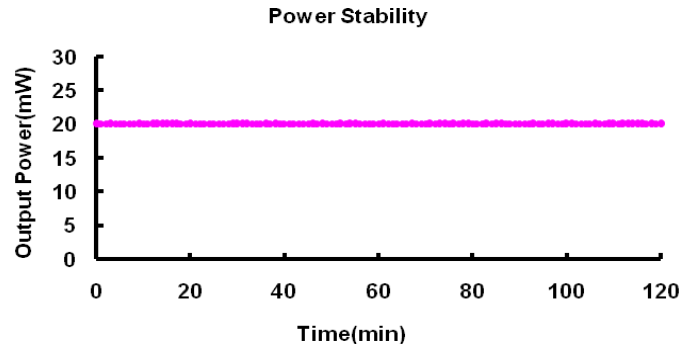
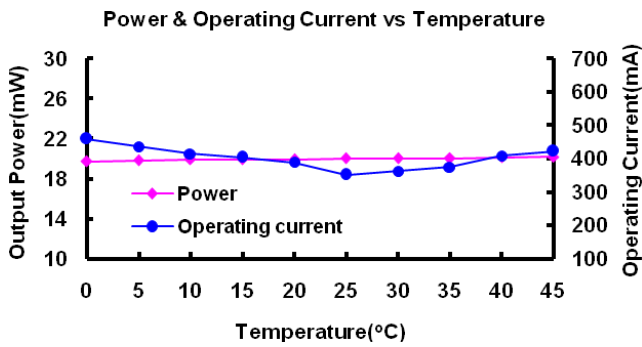
Model Number		GDLM-A020			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		19mW	20mW <sup>①</sup>	21mW	@25 °C
Power Stability	2hours @ Constant Temp	-	-	+/-5%	APC
	Over Operating Temp Range	-	-	+/-25%	
Operating Temperature (Case)		-	0~+45 °C	-	APC
Residual IR		-	-	1%	
Beam Diameter		-	-	12mm	@10m
Beam Divergence		-	-	1.2mrad	Full angle
Roundness		70%	80%	100%	
Warm Up Time		-	1s	-	0~45 °C
<b>Electrical Parameters</b>					
LD Working Current		-	380mA <sup>②</sup>	700mA	
LD Working Voltage		1.6V	1.9V	2.2V	
Monitor Current		50uA	-	300uA	
GDL Power Consumption		-	0.73W <sup>③</sup>	1.54W	
<b>Mechanical Parameters</b>					
Laser Head Dimensions	Length	34mm	35mm	36mm	
	Diameter	11.95mm	12mm	12.05mm	
Beam Alignment Tolerance	Position( $\Delta r$ )	-	0.3mm	0.5mm	
	Angle	-	7mrad	17.5mrad	
Laser Weight		-	9.5g	-	
<b>Reliability</b>					
Storage Temperature		-20 to +60 °C			
Shock		1000g, 1ms, 6 shocks, 3 axes, 2 shocks/axis			
Vibration		20~2000Hz, 0.02g <sup>2</sup> /Hz, 3 axes, 1hr/axis			
Expected Lifetime (MTTF)		5000hrs	-	-	@20mW & 25°C

Note: <sup>①</sup>10~30mW is optional

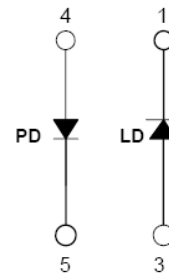
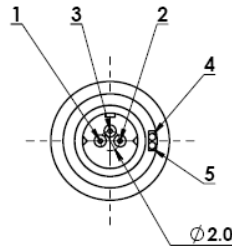
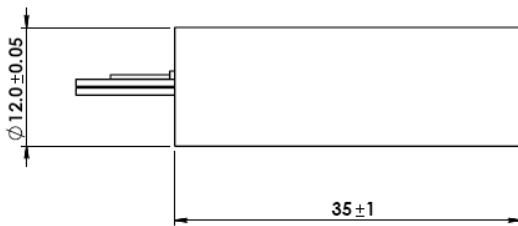
<sup>②</sup>20mW at 25 °C

<sup>③</sup>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-