

## GDL-A-0020-WTB-00


**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-A-0020-WTB-00			
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)		10~+40 °C	-	-	APC
Residual IR		-	-	1%	
Beam Diameter		-	-	0.2mm	@Output window
Beam Divergence		-	6.6mrad	8.6mrad	Full angle, 1/e <sup>2</sup>
Roundness		70%	80%	100%	
M-Square		-	1.2	1.4	
<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	17.4mm	17.6mm	17.8mm	
	Diameter	10.4mm	10.5mm	10.6mm	
Beam Alignment Tolerance	Position( $\Delta r$ )	-	0.3mm	0.5mm	
	Angle	-	7mrad	17.5mrad	
Laser Weight		-	6.4g	-	
<b>Reliability</b>					
Storage Humidity		-	5%~85% R.H. <sup>④</sup>	-	
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	-	-	@Rated Power & Room Temp

 Note: <sup>①</sup>10~30mW is optional

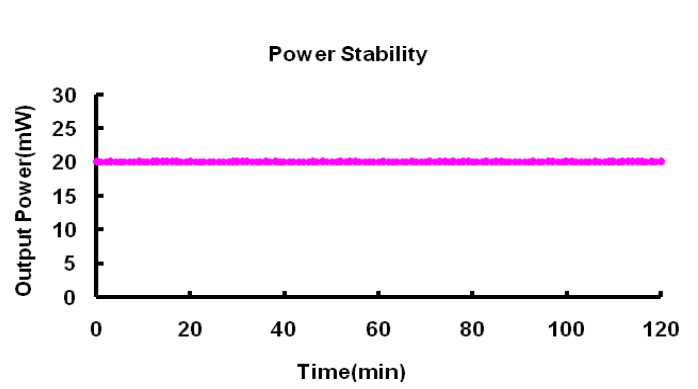
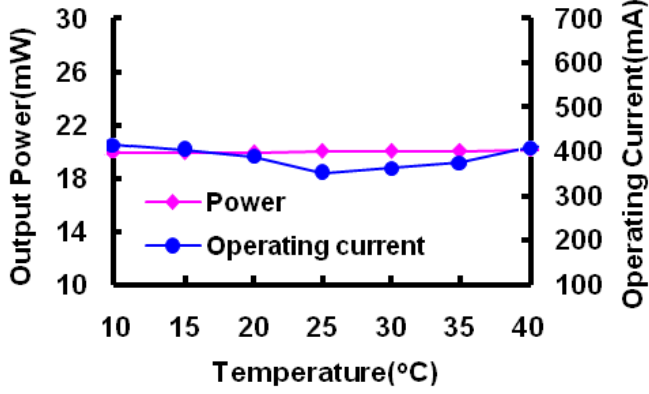
<sup>②</sup>20mW at 25 °C

<sup>③</sup>20mW at 25 °C

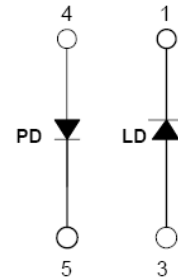
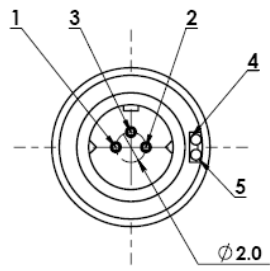
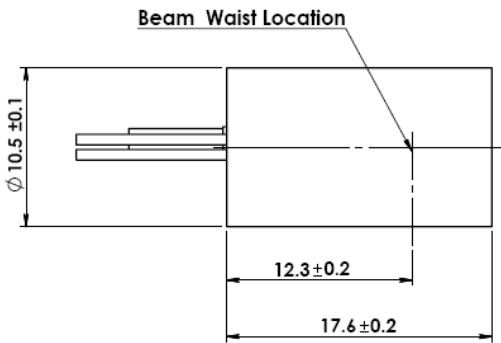
④ Non-condensing

### Typical Output Performance

Power & Operating Current vs Temperature



### Dimensions and Pin Configuration (Unit: mm)



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