

## GDL-S-0500-WTS-00



### Key Features:

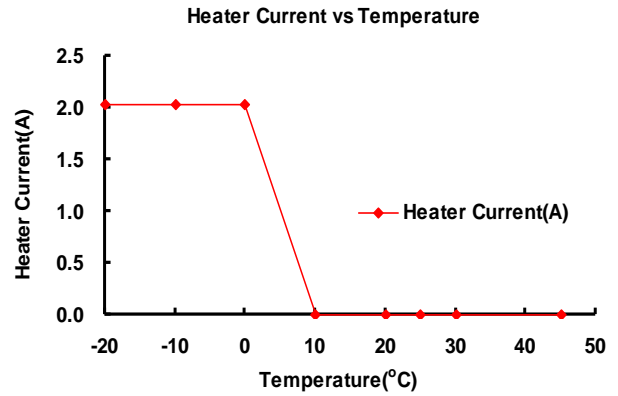
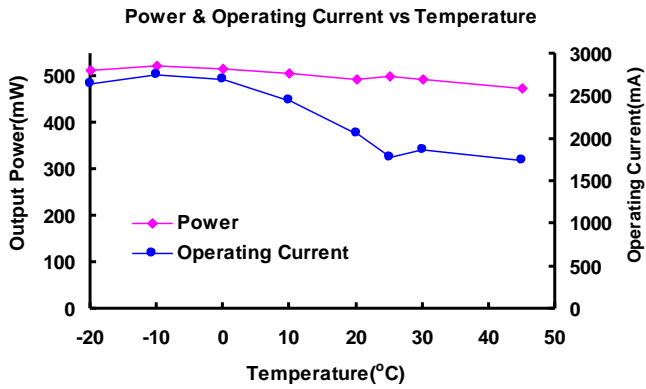
High Power  
 High Reliability  
 Wide Operating Temperature  
 Heater and Thermistor Inside

### Applications:

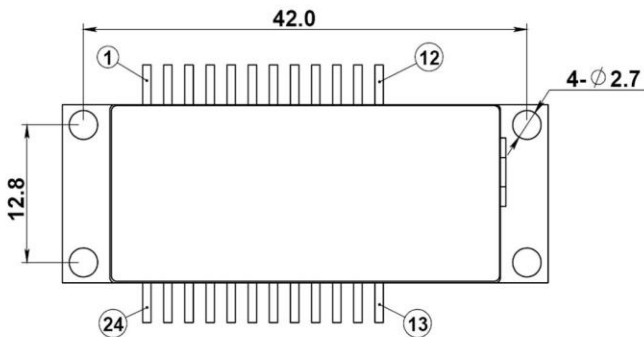
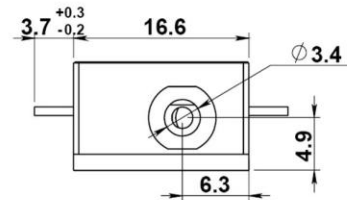
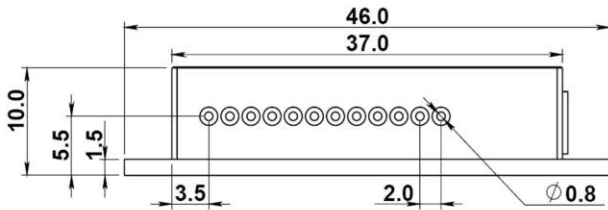
Laser Display  
 Surveying Equipment  
 Laser Alignment & Pointing

Model Number		GDL-S-0500-WTS-00			
Optical Parameters		Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		375mW	500mW	625mW	
Power Stability	Over Operating Temp Range	-	+/-20%	+/-25%	
Operating Temperature (Case)		-20~+45 °C	-	-	APC
Beam Divergence		-	-	15mrad	Full angle, 1/e <sup>2</sup>
Roundness		70%	-	-	
M-Square		-	-	3	
<b>Electrical Parameters</b>					
LD Working Current		-	-	3000mA	
LD Working Voltage		-	-	2.2V	
Monitor Current		500uA	1000uA	1500uA	500mW @ 25 °C
Resistance of Heater		3Ω	4Ω	5Ω	
Heater Current		-	-	2.2A	At -20°C
Warm Up Time		-	-	2 minutes	At -20°C
<b>Mechanical Parameters</b>					
Laser Head Dimensions(L*W*H)		-	46mm*16.6mm*10mm	-	
Beam Alignment Tolerance	Position(Δr)	-	-	1.2mm	
	Angle	-	-	17.5mrad	
Laser Weight		20g	25g	30g	
<b>Reliability</b>					
Operating Humidity		-	5%~85% R.H.	-	
Storage Temperature		-	-40 to +85 °C	-	
Shock		-	1500g, 0.5ms, 6 shocks	-	3 axes, 2 shocks/axis
Vibration		-	20~2000Hz, 0.02g <sup>2</sup> /Hz	-	3 axes, 1hr/axis
Expected Lifetime (MTTF)		2000hrs	-	-	Room temperature

## Typical Output Performance



## Dimensions and Pin Configuration (Unit: mm)



**PIN Configuration:**  
*Package is isolated from components electrodes*

PIN	Description	PIN	Description
1	LD+	13	-
2	Thermistor(1)	14	PD+
3	Thermistor(2)	15	PD+
4	-	16	PD-
5	-	17	PD-
6	-	18	-
7	-	19	-
8	-	20	-
9	-	21	-
10	-	22	Heater(1)
11	-	23	Heater(2)
12	-	24	LD-