

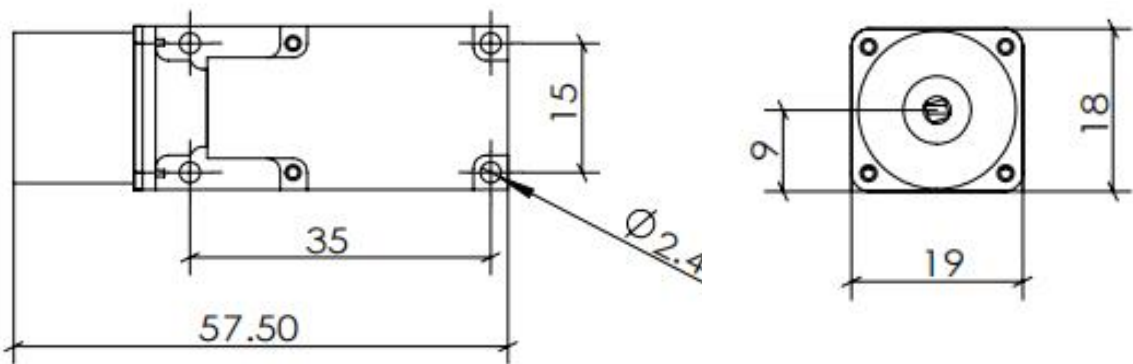


Y577D1000-19x18x58-40

Features

- DPSS Laser
- Compact Design
- High Stability
- Yellow Laser

Dimensions (Unit: mm)



Specifications				
Model Number		Y577D1000-19x18x58-40		
Mechanical Specifications		Min	Typ	Max
Laser Head	Width x Height (mm)	-	19X18	19.1x18.1
	Length (mm)	-	-	58
	Weight (g)	-	-	200
Housing Material		Brass with gold-plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		574	577	580
Output Power (mW)		1000	1200	-
Power Stability at const. Temperature ⁽¹⁾		-	1%	3%
Output Power Mode		CW		
Laser Class		4		

⁽¹⁾ after max. 3 minutes (RMS)

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	30	40
Beam Waist (μm)		-	300	-
Beam Alignment Tolerance	Position (Δr, mm)	-	-	0.5
	Off-axis Angle (mrad)	-	35	60
Beam Diameter at Output Window (mm)		-	0.5	
Beam Roundness		-	-	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		Multi		
Polarization Ratio (Linear)		100:1	-	-
Residual IR		-	-	3%
Electrical Specifications		Min	Typ	Max
Power Type		ACC		
LD Voltage (DC, V)		1.8	2	2.3
LD Operating Current (mA) at 2V		-	10,000	12,000
Thermistor Constants		A = 2.231e ⁻³ B = 4.694e ⁻⁵ C = 0.884e ⁻⁶		
Thermistor Resistance		6.6KΩ@35°C 8.2KΩ@30°C 10.0KΩ@25°C 12.3KΩ@20°C 16.4KΩ@15°C 18.5KΩ@10°C		
Power Consumption (W) at 25°C		-	20	27.6
Housing Isolation		No		
ESD protection		No		
Wire Length (mm)		200 (+/-50)		
Wire Type ⁽³⁾		14AWG / 28AWG		
Reliability		Min	Typ	Max
Operating Temperature Range (°C) ⁽³⁾		T-1	T	T+1
Storage Temperature (°C)		0	-	40
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25°C)		10,000	-	-
RoHS Compliance Declaration		Yes		

⁽¹⁾ Full Angle (1/e²)

⁽²⁾ 14AWG for LD wires. 28AWG for NTC wires

⁽³⁾ T is a NTC tempearture point from 15-35°C. When the laser works at different current, the corresponding optimal working temperature is different. Will provide test report for each module.

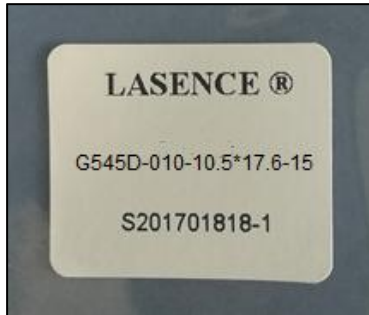
Remarks

- Product ID for placing orders: Y577D1000-19x18x58-40
- Datasheet Version: 1
- No Photodiode
- Customer is responsible for suitable heat sinking
- Label on plastic bag (see picture of another product's label in picture 2):
 - LASENCE®
 - Y577D1000-19x18x58-40
 - Lasence Order Number - Module Number
 - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)
- Example of beam spot (see picture3)
- Laser Beam Warning Label on module housing (see picture 1)
- Laser Marking on module housing (see picture 2)

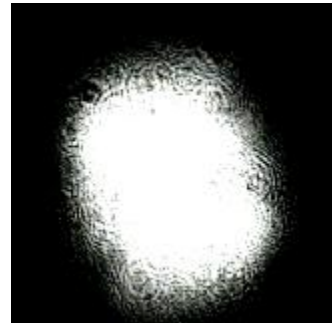
Picture 1



Picture 2

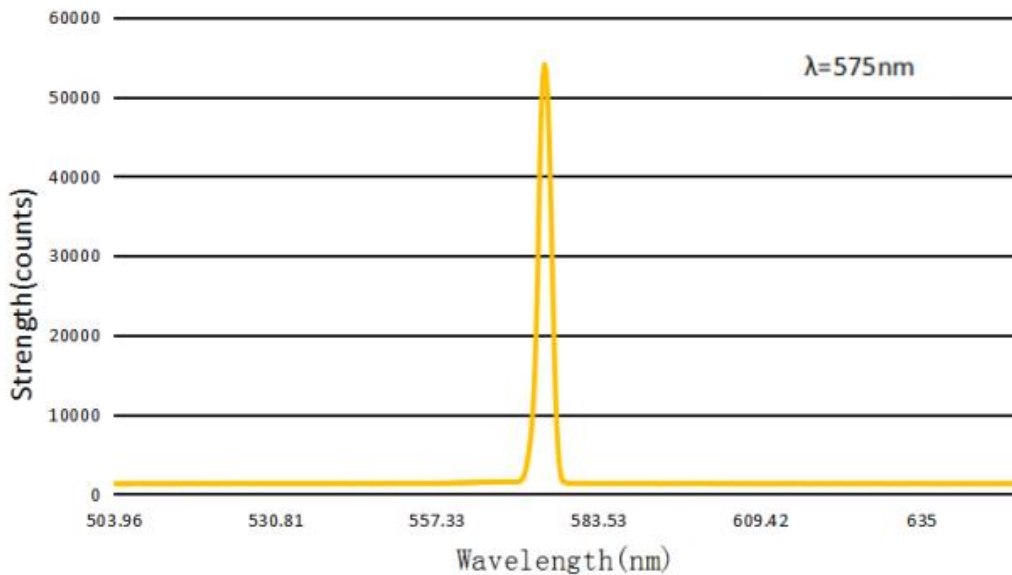


Picture 3



Typical Output Performance (examples)

1) Wavelength



2) Power stability (4 hours power stability)

