

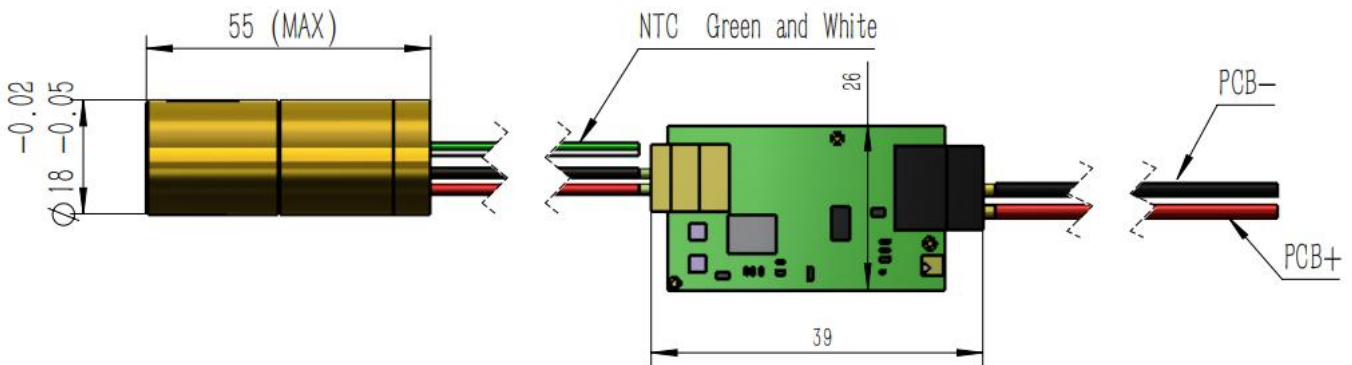


Y555D050-18x55-30-1

Features

- DPSS Laser
- Wide Temperature Range
- Fast Rise Time
- High Reliability

Dimensions (Unit: mm)



Specifications

Model Number		Y555D050-18x55-30-1		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	17.95	-	17.98
	Length (mm)	-	-	55
	Weight (g)	-	-	210
Housing Material		Brass with gold-plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		549	555	561
Output Power (mW) at T ⁽¹⁾ at 2.5A		50	60	-
Output Power (mW) from -30 to 50°C		25	-	-
Power Stability at const. Temperature ⁽²⁾		-	+/- 5%	+/- 10%
Output Power Mode		CW		
Laser Class		3B		

⁽¹⁾ see remarks in page 2 no# 4

⁽²⁾ after max. 3 minutes

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	30	40
Beam Waist (μm)		-	250	-
Beam Alignment Tolerance	Position (Δr, mm)	-	-	0.5
	Off-axis Angle (mrad)	-	35	60
Beam Diameter at Output Window (mm)		-	0.5	
Beam Roundness		-	70%	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM _n ⁽²⁾		
Polarization Ratio (Linear)		100:1	-	-
Residual IR		-	-	3%
Electrical Specifications		Min	Typ	Max
Power Type		ACC		
Operating Voltage (DC, V)		4.5	5	5.5
Operating Operating Current (mA) at 5V		-	1.2	1.1
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		-	6	6
Housing Isolation		No		
ESD protection		No		
Wire Length (mm) ⁽³⁾		200 (+/-50)		
Wire Type ⁽³⁾		20AWG / 28AWG		
Reliability		Min	Typ	Max
Operating NTC Temperature Range (°C) ⁽⁴⁾		T+0.3	T	T-0.3
Rise Time (mins)		-	3	5
Storage Temperature (°C)		0	-	40
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25°C)		5,000	-	-
RoHS Compliance Declaration		Yes		

(1) Full Angle (1/e²)

(2) See picture 5 on page 3 for example of beam spot

(3) Wire Length can be customized. 20AWG for LD wires. 28AWG for NTC wires.

(4) T is one optimum LD operating temperature between 15 to 35°C reflected by NTC resistance and will be advised in each test report.

(5) to 50% of full Output Power. Dot (~10mW) can be seen after 0.2s if >1A

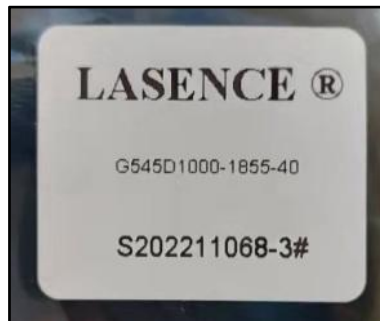
Remarks

- Product ID for placing orders: Y555D50-1855-30-10
- 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®
 - Y555D50-1855-30 -10
 - Lasence Order Number - Module Number
 - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)
- Example of beam spot (see picture 4)
- Laser Beam Warning Label on module housing (see picture 1)
- Laser Marking on module housing (see picture 3):
 - Lasence Material Code
 - Lasence Order Number - Module Number

Picture 1



Picture 2



Picture 3



Picture 4

