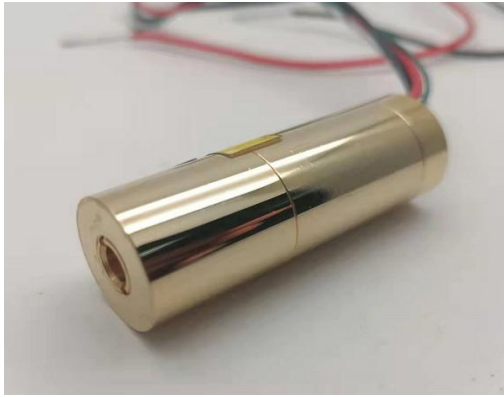


# Yellow 561nm Laser Module

## Wide Temperature Range

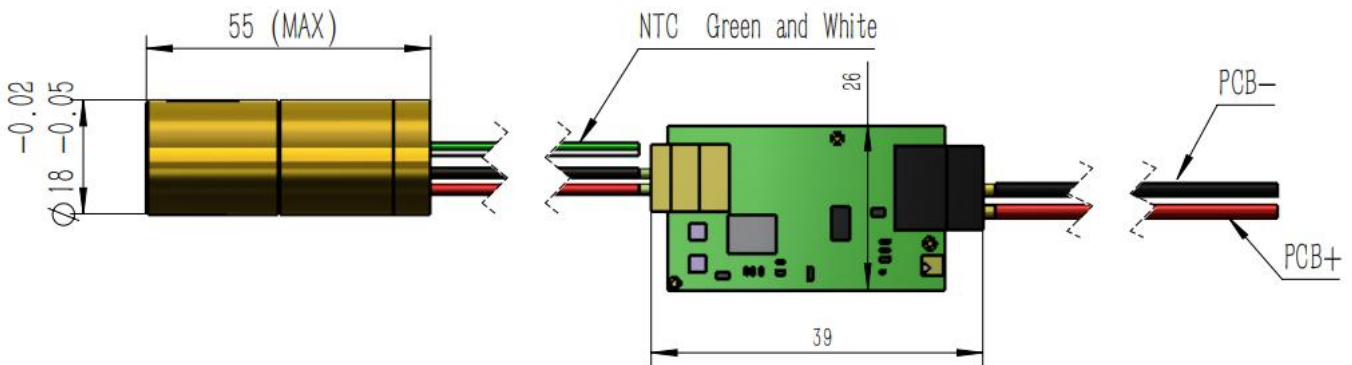


**Y561D050-18x55-30-1**

### Features

- DPSS Laser
- 50mW@561nm
- Fast Rise Time
- High Reliability

### Dimensions (Unit: mm)



### Specifications

Model Number		Y561D50-18x55-30-1		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	17.95	-	17.98
	Length (mm)	-	-	55
	Weight (g)	-	-	200
Housing Material		Brass with gold-plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		553	561	565
Output Power (mW) at 25°C		50	60	-
Power Stability at const. Temperature <sup>(1)</sup>		-	+/- 5%	+/- 10%
Output Power Mode		CW		
Laser Class		3B		

<sup>(1)</sup> after max. 3 minutes

<b>Beam Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Beam Divergence (mrad) <sup>(1)</sup>		-	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 <sub>n0</sub>		
Polarization Ratio (Linear)		100:1	-	-
Residual IR		-	-	3%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		ACC		
Operating Voltage (DC, V)		4.5	5	5.5
Operating Operating Current (A) at 5V		-	1.1	1.2
Thermistor Constants		A = 2.231e <sup>-3</sup> B = 4.694e <sup>-5</sup> C = 0.884e <sup>-6</sup>		
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) <sup>(2)</sup>		200 (+/-50)		
Wire Type <sup>(3)</sup>		20AWG / 28AWG		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating Case Temperature Range (°C)		24	25	26
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		

<sup>(1)</sup> Full Angle (1/e<sup>2</sup>)

<sup>(2)</sup> 20AWG for Power Supply wires. 28AWG for NTC wires