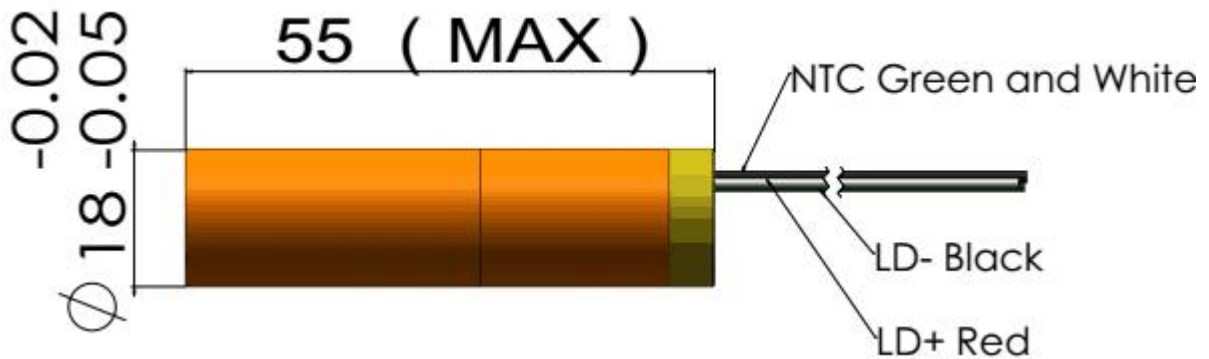


## Y561D050-18x55-30

### Features

- DPSS Laser
- Yellow Laser
- Fast Rise Time
- High Reliability
- with NTC

### Dimensions (Unit: mm)



### Specifications

Model Number		Y561D050-18x55-30		
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)		559	561	563
Output Power (mW) at T <sup>(1)</sup> at 2.5A		50	60	-
Output Power (mW) from -30 to 50°C		25	-	-
Power Stability at const. Temperature <sup>(2)</sup>		-	+/- 5%	+/- 10%
Output Power Mode		CW		
Laser Class		3B		

<sup>(1)</sup> see remarks in page 2 no# 4

<sup>(2)</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	50
Beam Waist (μm)		-	250	-
Beam Alignment Tolerance	Position (Δr, mm)	-	-	0.5
	Off-axis Angle (mrad)	-	35	50
Beam Diameter at Output Window (mm)		-	0.5	
Beam Roundness		-	70%	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM <sub>n</sub> <sup>(2)</sup>		
Polarization Ratio (Linear)		100:1	-	-
Residual IR		-	-	3%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		ACC		
LD Voltage (DC, V)		1.8	2	2.3
LD Operating Current (mA) at 2V		-	2,000	2,500
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		-	4	5.75
Housing Isolation		No		
ESD protection		No		
Wire Length (mm) <sup>(3)</sup>		200 (+/-50)		
Wire Type <sup>(3)</sup>		20AWG / 28AWG		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating NTC Temperature Range (°C)		T-0.3	T <sup>(4)</sup>	T+0.3
Warm-up Time (minutes) at 2.5A <sup>(5)</sup>		-	3	5
Storage Temperature (°C)		0	-	40
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at T <sup>(4)</sup> )		5,000	-	-
RoHS Compliance Declaration		Yes		

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

(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) Dot (~10mW) can be seen after 0.2s if >1A