

# Green 545nm Laser Module

## Wide Temperature Range

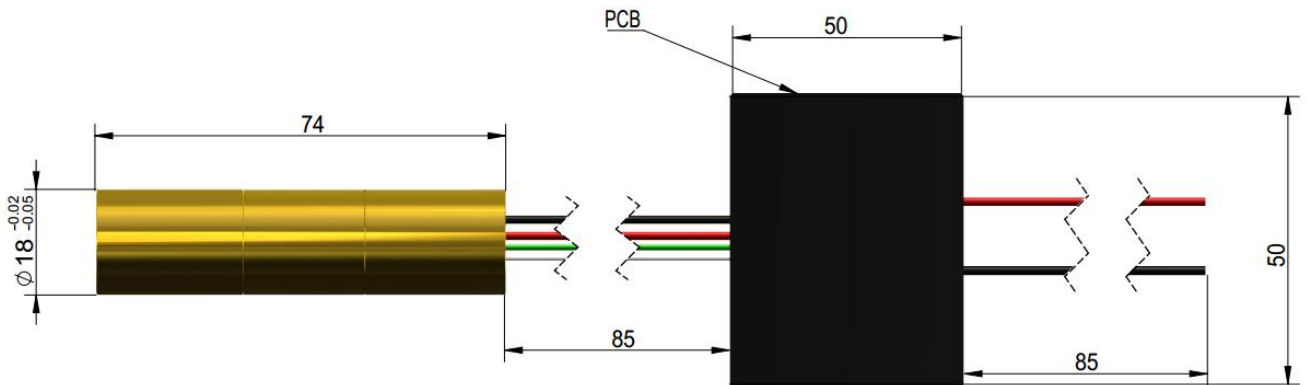


**G545D100-18x74-0.8-10**

### Features

- DPSS Laser
- 100mW@545nm
- Wide Temperature Range
- Fast Rise Time
- High Reliability

### Dimensions (Unit: mm)



### Specifications

Model Number		G545D100-18x74-0.8-10		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	17.95	17.99	18
	Length (mm)	73	73.5	74
	Weight (g)	-	-	120
Housing Material		Brass with gold-plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		543	545	547
Output Power (mW) from 10 to 50°C <sup>(1)</sup>		70	100	160
Output Power Mode		PWM(70%-100%, adjustable)		
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>		-	0.6	0.8
Beam Alignment Tolerance	Position ( $\Delta r$ , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	25	35
Beam Diameter at Output Window (mm)		-	5	6
Beam Diameter at 15m (mm)		-	8	10
Beam Mode Longitude		Multi		
Beam Mode Transverse		Near TEM <sub>00</sub>		
Residual IR		-	-	1%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		ACC / 7kHz input		
PCB Voltage (DC, V) <sup>(4)</sup>		-	5	5.3
PCB Operating Current (mA) <sup>(4)</sup>		-	1600	2000
Housing Isolation		No		
ESD protection		No		
LD Wire Length (mm) <sup>(2)</sup>		85 (+/-5)		
LD Wire Type <sup>(2)</sup>		20AWG		
Reverse Voltage Protection		YES		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating Case Temperature Range (°C)		10	-	50
Rise Time (seconds) <sup>(3)</sup>		-	0.5	1
Storage Temperature (°C)		-40	-	60
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25°C)		5,000	-	-
RoHS Compliance Declaration		Yes		

(1) Full Angle ( $1/e^2$ )

(2) Can be customized.

(3) to 75% of full Output Power

(4) over Temperature range from 10°C to 50 °C

(5) see beam spot picture on page 3