

# Green 545nm Laser Module

## Wide Temperature Range

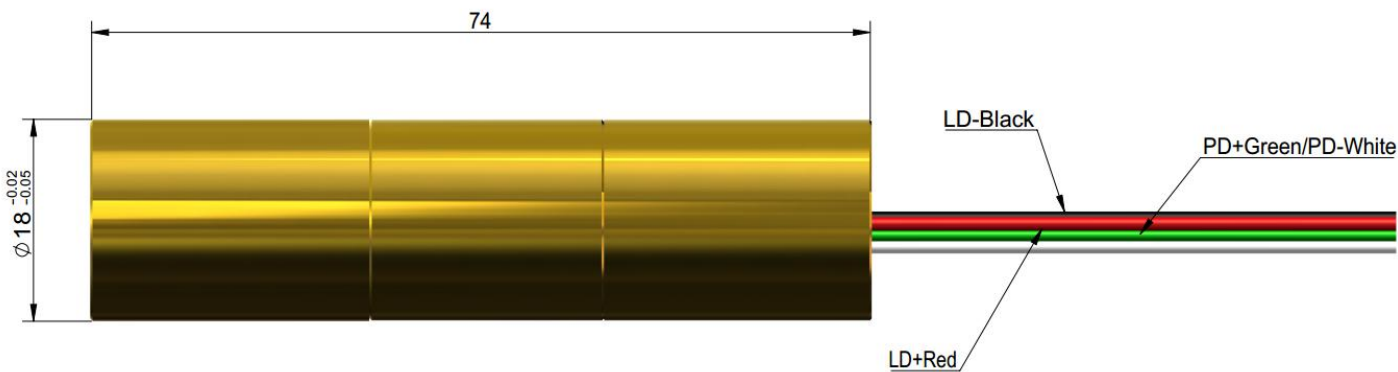


**G545D100-18x75-1-00**

### Features

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

### Dimensions (Unit: mm)



### Specifications

Model Number		G545D100-18x75-1-00		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	17.95	17.99	18
	Length (mm)	73	73.5	74
	Weight (g)	-	-	90
Housing Material		Brass with gold-plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		543	545	547
Output Power (mW) from -30 to 50°C <sup>(1)</sup>		70	100	130
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>		-	-	1
Beam Alignment Tolerance	Position ( $\Delta r$ , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	20	30
Beam Diameter at Output Window (mm)		-	12	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM10		
Residual IR		-	-	1%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		APC		
LD Voltage (DC, V)		1.8	2	2.6
LD Operating Current (mA)		-	1500	2500
Monitor Current ( $\mu A$ ) @25°C		190	375	500
Monitor Current Stability <sup>(4)</sup>		-	+/- 10%	+/-25%
Housing Isolation		No		
ESD protection		No		
LD Wire Length (mm) <sup>(2)</sup>		85 (+/-5)		
LD Wire Type <sup>(2)</sup>		20AWG		
PD Wire Length (mm) <sup>(2)</sup>		85 (+/-5)		
PD Wire Type <sup>(2)</sup>		28AWG		
Reverse Voltage Protection		No		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating Case Temperature Range (°C)		-30	-	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 -30°C to 50 °C