

# Green Laser Module

## Wide Temperature Range

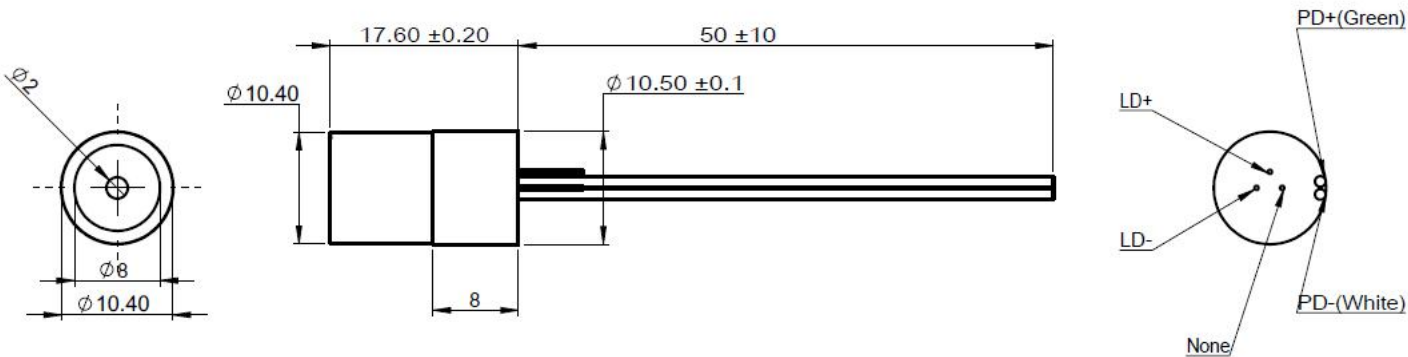


**G545D-010-10.5x17.6-15**

### Features

- Small Size
- Wide Temperature Range
- Fast Rise Time
- High Reliability

### Dimensions (Unit: mm)



Specifications				
Model Number		G545D-010-10.5x17.6-15		
<b>Mechanical Specifications</b>		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Laser Head	Diameter (mm)	10.4	10.5	10.6
	Length (mm)	17.4	17.6	17.8
	Weight (g)	6.6	6.75	6.9
Housing Material		Brass with gold-plating		
<b>Optical Specifications</b>		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Wavelength (nm)		543	545	547
Output Power (mW) at 25°C		9.5	10	10.5
Power Stability	at const. Temperature <sup>(1)</sup>	-	-	+/- 5%
	over Temperature Range	-	-	+/- 25%
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>		-	15	18
Beam Size at 10m (mm)		-	150	180
Beam Alignment Tolerance	Position ( $\Delta r$ , mm) <sup>(2)</sup>	-	0.3	0.5
	Off-axis Angle (mrad) <sup>(3)</sup>	-	14	35
Beam Diameter at Output Window (mm)		-	-	0.2
Beam Roundness		70%	80%	100%
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM00		
Polarization Ratio (Linear)		100:1	-	-
M <sup>2</sup>		-	1.2	1.4
Residual IR		-	-	1%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		APC		
LD Voltage (DC, V)		1.6	1.9	2.2
LD Operating Current (mA) <sup>(4)</sup> at 1.9V		100	-	300
Monitor Current ( $\mu$ A)		50	-	200
Housing Isolation		No		
ESD protection		No		
Wire Length (mm)		50 (+/-10)		
Wire Type		32AWG		
Reverse Voltage Protection		No		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating Case Temperature Range (°C)		10	-	40
Rise Time (Seconds) <sup>(4)</sup>		-	0.2	0.5
Storage Temperature (°C)		-20	-	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) at Output Window

(3) Full Angle

(4) to 75% of full Output Power