

Green Laser Module

Wide Temperature Range

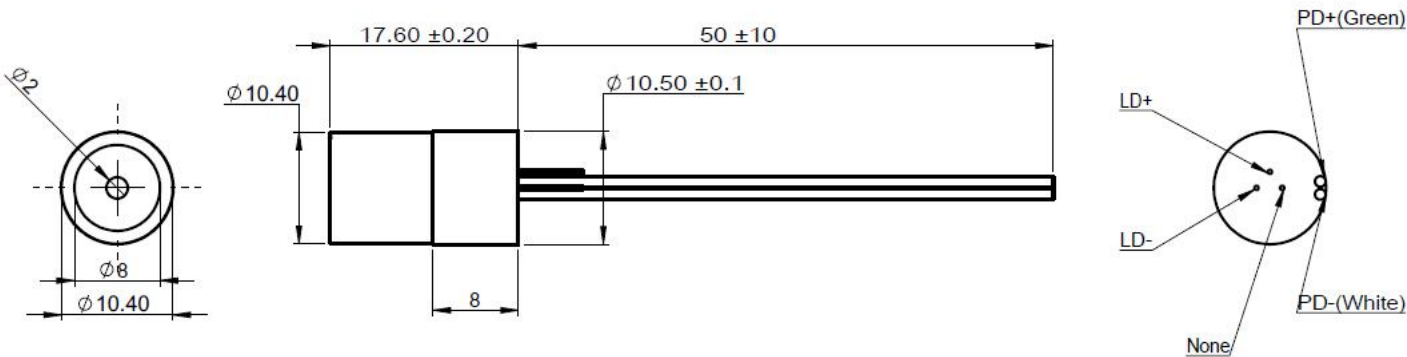


G545D010-11x18-15-(10-40)-00

Features

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

Dimensions (Unit: mm)



Specifications				
Model Number		G545D010-11x18-15-(10-40)-00		
Mechanical Specifications		Min	Typ	Max
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		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		543	545	547
Output Power (mW) at 25°C		9.5	10	10.5
Power Stability	at const. Temperature ⁽¹⁾	-	-	+/- 5%
	over Temperature Range	-	-	+/- 25%
Output Power Mode		CW		
Laser Class		3B		

⁽¹⁾ after max. 3 minutes

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	15	18
Beam Size at 10m (mm)		-	150	180
Beam Alignment Tolerance	Position (Δr , mm) ⁽²⁾	-	0.3	0.5
	Off-axis Angle (mrad) ⁽³⁾	-	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 ²		-	1.2	1.4
Residual IR		-	-	1%
Electrical Specifications		Min	Typ	Max
Power Type		APC		
LD Voltage (DC, V)		1.6	1.9	2.2
LD Operating Current (mA) ⁽⁴⁾ at 1.9V		-	-	300
Monitor Current (μ A)		50	-	200
Housing Isolation		No		
ESD protection		No		
Wire Length (mm)		50 (+/-10)		
Wire Type		28AWG		
Reverse Voltage Protection		No		
Reliability		Min	Typ	Max
Operating Case Temperature Range ($^{\circ}$ C)		-10	-	40
Rise Time (Seconds) ⁽⁵⁾		-	0.2	0.5
Storage Temperature ($^{\circ}$ C)		-20	-	60
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25 $^{\circ}$ C)		5,000	-	-
RoHS Compliance Declaration		Yes		

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

(2) at Output Window

(3) Full Angle

(4) over Operating Case Temperature Range

(5) to 75% of full Output Power