

Green Line Laser Module

Wide Temperature Range

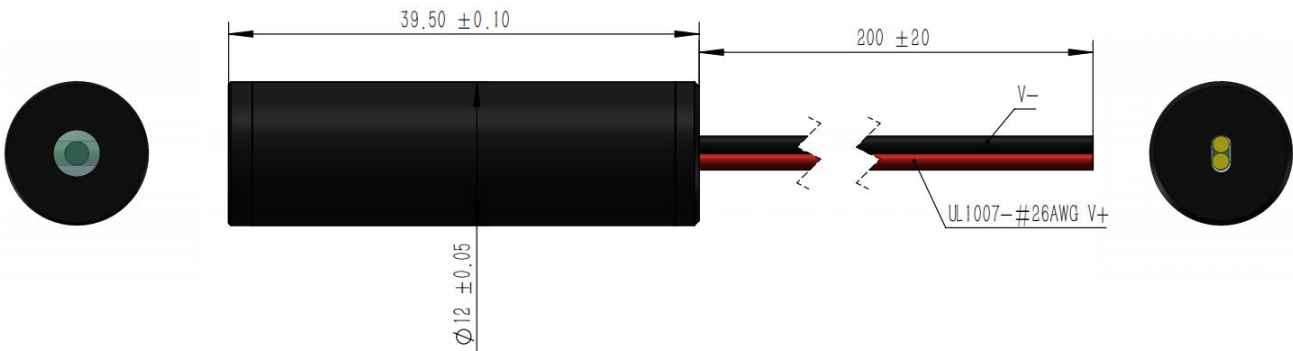


G545L010-12x39.5-X-(-30-50)-10

Features

- Gaussian Line
- Wide Temperature Range
- Fast Rise Time
- High Reliability

Dimensions (Unit: mm)



Specifications				
Model Number		G545L010-12x39.5-XXX-(-30-50)-10		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	11.95	12 ⁽¹⁾	12.05
	Length (mm)	39.4	39.5 ⁽¹⁾	39.6
	Weight (g)	-	14.5	-
Housing Material		Black Anodized Aluminum		
Optical Specifications		Min	Typ	Max
Wavelength (nm) ⁽²⁾		544	545	546
Output Power (mW) ⁽³⁾		7.5	10	12.5
Power Stability at const. Temperature ⁽⁴⁾		-	+/- 2%	+/- 5%
Output Power Mode		CW		

- (1) Other Dimensions available on demand
(2) over Operating Case Temperature Range
(3) at Cylinder (Optional: Powell) Lens Exit
(4) after max. 3 minutes

Beam Specifications	Min	Typ	Max
Fan Angle (1/e ² , degree) ⁽¹⁾	X-5	X ⁽¹⁾	X+5
Line width @ 10m (mm) ⁽²⁾	-	3.5	4.5
Line Curvature (mm) at 10m	-	-	±0.5
Deviation of Laser Beam (mrad) ⁽³⁾	-	6	10
Power Distribution	Gaussian		
Beam Mode Longitude	Multi		
Electrical Specifications	Min	Typ	Max
PCB Type	APC		
Voltage (DC, V)	2.8	3.0	5.2
Operating Current (mA) ⁽⁴⁾ at 3V	-	210	290
Housing Isolation	Yes		
ESD protection	No		
Wire Length (mm)	200 ± 20		
Wire Type ⁽⁵⁾	UL1007 26#AWG		
Connector Model ⁽⁶⁾	None		
Reverse Voltage Protection	Yes		
Reliability	Min	Typ	Max
Operating Case Temperature Range (°C) ⁽⁷⁾	-30	-	50
Rise Time (Seconds) ⁽⁸⁾	-	0.05	0.2
Storage Temperature (°C)	-40	-	60
Environmental Humidity (RH, %)	5	-	85
Lifetime (hours) (MTTF at 25°C)	5,000	-	-
RoHS Compliance Declaration	Yes		

(1) X replace by fan angle:

Gaussian: 10 / 15 / 20 / 30 / 45 / 60 / 75 / 90 / 120°

(2) Optional: Focused Line on demand

(3) from Laser Module Mech Centerline (Full Angle)

(4) over Operating Case Temperature Range

(5) Optional: Alternative Wire Types on demand

(6) Optional: Connector Models on demand

(7) A = 10-40 °C, B = 10-50 °C, C = 0-40 °C, D = -10-50 °C, E = -30-50°C

(8) to 75% of full Output Power