

Green Line Laser Module Wide Temperature Range

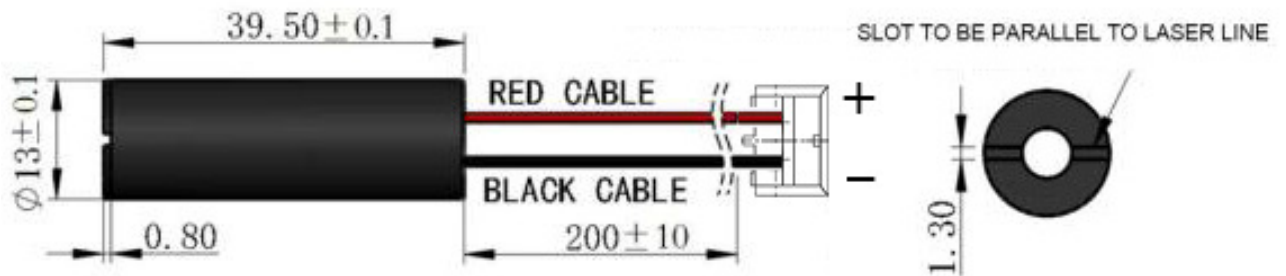


G545L020-13x39.5-15-(10-50)-10-SF600

Features

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

Dimensions (Unit: mm)



Specifications				
Model Number		G545L020-13x39.5-15-(10-50)-10-SF600		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	12.9	13.0	13.1
	Length (mm)	39.4	39.5	39.6
	Weight (g)	14.0	14.5	15.0
Housing Material		Black Anodized Aluminum		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		544	545	546
Output Power (mW) ⁽¹⁾		-	20	-
Power Stability	at const. Temperature ⁽²⁾	-	+/- 5%	+/- 15%
	over Temperature Range	-	+/- 15%	+/- 30%
Output Power Mode		CW		

⁽¹⁾ at Cylinder Lens Exit

⁽²⁾ after max. 3 minutes

Beam Specifications	Min	Typ	Max
Fan Angle (Degree)	12	15	18
Linewidth (mm) at Distance at 600mm	-	0.5	0.7
Beam Alignment Tolerance (mrad) ⁽¹⁾	-	-	2
Line Parallelism (Degree) ⁽²⁾	-	±0.5	-
Line Curvature (mm) at 10m	-	±0.5	±1
Focus Distance (mm)	-	600	-
Power Distribution	Gaussian		
Beam Mode Longitude	Multi		
Residual IR	-	-	4%
Electrical Specifications	Min	Typ	Max
Power Type	APC		
Voltage (DC, V)	2.8	3	4.5
Operating Average Current (mA) ⁽³⁾ at 3V	-	250	300
Housing Isolation	Yes		
Wire Length (mm)	200±10		
Wire Type	24AWG φ1.1mm		
Connector Model	440129-2 ⁽⁴⁾		
Reliability	Min	Typ	Max
Operating Case Temperature Range (°C)	10	-	50
Rise Time (Seconds) ⁽⁵⁾	-	-	0.5
Storage Temperature (°C)	-30	-	60
Environmental Humidity (RH, %)	10	-	80
Lifetime (hours) (MTTF at 25°C)	5,000	-	-
RoHS Compliance Declaration	Yes		

(1) Off-axis Half Angle

(2) Laser Line to Slot Mechanical Axis

(3) over Operating Case Temperature Range

(4) TE Connectivity Manufacturer Part Number (Digi-Key Part Number: A100011-ND)

(5) to 75% of full Output Power