

Green 545nm Laser Module

Wide Temperature Range



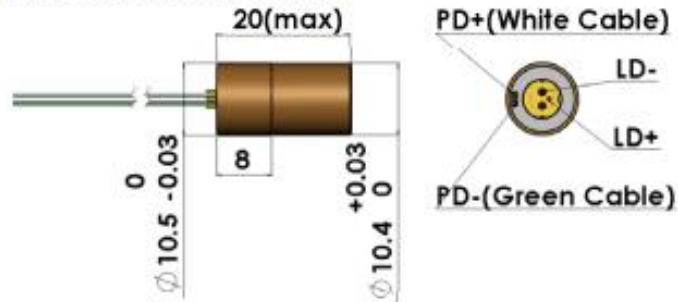
G545D005-10.5x20-10-00

Features

- DPSS Laser
- 5mW@545nm
- Wide Temperature Range
- Fast Rise Time
- High Reliability

Dimensions (Unit: mm)

Dimensions and Pin Configuration (Unit: mm)



Specifications				
Model Number		G545D005-10.5x20-10-00		
Mechanical Specifications		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Laser Head	Diameter (mm)	10.47	10.49	10.50
	Length (mm)	-	-	20
	Weight (g)	-	-	7
Housing Material		Brass with gold-plating		
Optical Specifications		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Wavelength (nm)		543	545	547
Output Power (mW) from -30 to 50°C ⁽¹⁾		3.5	5	6.5
Output Power Mode		CW		
Laser Class		3B		

⁽¹⁾ after max. 3 minutes

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	8	10
Beam Alignment Tolerance	Position (Δr , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	20	30
Beam Diameter at Output Window (mm)		-	0.5	1
Beam Roundness		70%	80%	100%
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM ₀₀		
Polarization Ratio (Linear)		100:1	-	-
Residual IR		-	-	1%
Electrical Specifications		Min	Typ	Max
Power Type		APC		
LD Voltage (DC, V)		1.8	2	2.6
LD Operating Current (mA)		-	-	350
Monitor Current (μ A)		30	50	100
Monitor Current Stability ⁽⁴⁾		-	+/- 10%	+/-25%
Housing Isolation		No		
ESD protection		No		
Wire Length (mm) ⁽²⁾		85 (+/-5)		
Wire Type ⁽²⁾		32AWG		
Reverse Voltage Protection		No		
Reliability		Min	Typ	Max
Operating Case Temperature Range (°C)		-30	-	50
Rise Time (seconds) ⁽³⁾		-	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) 32AWG for APC wires.

(3) to 75% of full Output Power

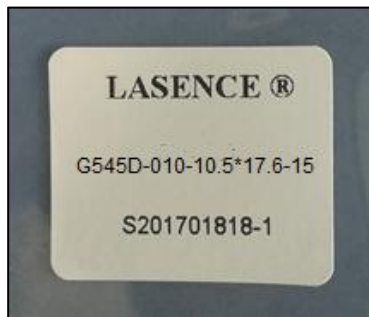
Remarks

- Product ID for placing orders: G545D005-10.5x20-10-00
- Datasheet Version: 1
- With Photodiode
- Customer is responsible for suitable heat sinking
- Label on plastic bag (see picture of another product's label in picture 2):
 - LASENCE®
 - G545D005-10.5x20-10-00
 - Lasence Order Number - Module Number
 - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)
- Laser Beam Warning Label on module housing (see picture 1)
- Laser Marking on module housing (see picture 3):
 - Lasence Material Code
 - Lasence Order Number - Module Number

Picture 1



Picture 2



Picture 3

