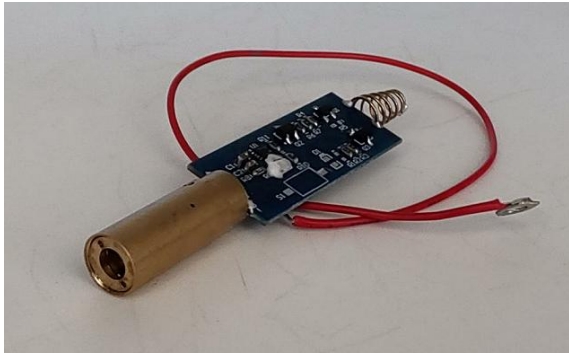


Green Dot Laser Module Wide Temperature Range

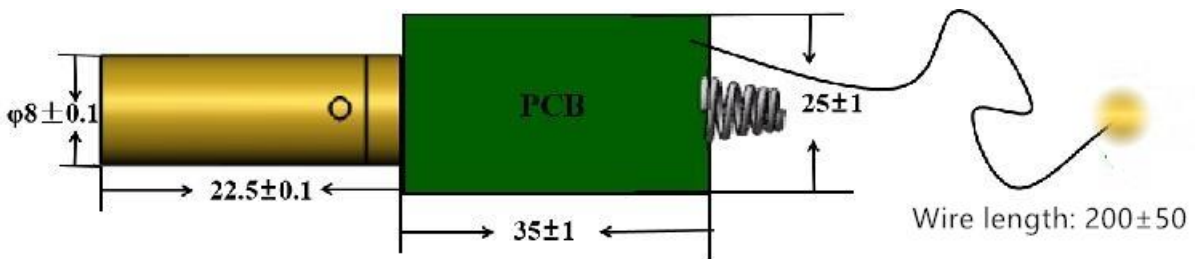


G545D005-8x57.5-1.5-(15-35)-10

Features

- Fast Rise Time
- High Reliability
- With Spring
- Wide Temperature Range

Dimensions (Unit: mm)



Specifications

Model Number		G545D005-8x57.5-1.5-(15-35)-10		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	7.9	8	8.1
	Length (mm)	21.5	22.5	23.5
	Weight (g)	-	10	-
PCB/Driver	Width (mm)	24	25	26
	Length (mm)	34	35	36
Housing Material		Brass		
Optical Specifications		Min	Typ	Max
Wavelength (nm) ⁽¹⁾		544	545	546
Output Power (mW) at 25°C		3.5	4	4.5
Output Mode		CW		
Power Stability over Temperature Range ⁽²⁾		-	+/- 20%	+/- 25%
Laser Class		3R		

⁽¹⁾ over Operating Case Temperature Range

⁽²⁾ after max. 3 minutes

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	1.0	1.5
Beam Alignment Tolerance	Position (Δr , mm) ⁽²⁾	-	0.3	0.5
	Off-axis Angle (mrad) ⁽³⁾	-	60	-
Beam Diameter at 20 feet (mm) ⁽⁴⁾		-	4	10
Beam Roundness		70%	-	100%
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM ₀₀		
Electrical Specifications		Min	Typ	Max
Power Type		ACC		
Voltage (DC, V)		2.8	3	3.5
Operating Current (mA) at 3V ⁽⁵⁾		-	160	290
Housing Isolation		No		
ESD protection		No		
Connector Model ⁽⁶⁾		None		
Reverse Voltage Protection		Yes		
Reliability		Min	Typ	Max
Operating Case Temperature Range (°C) ⁽⁷⁾		15	-	35
Rise Time (Seconds) ⁽⁸⁾		-	0.2	0.5
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) at Output Window

(3) Full Angle

(4) Optional: Focused Beam on demand

(5) over Operating Case Temperature

(6) Optional: Alternative connector Models on demand

(7) A = 15-35 °C, B = 10-50 °C, C = 0-40 °C, D = -10-50 °C, E = -30-50°C

(8) to 75% of full Output Power

Remarks

- Datasheet Version 1
- Customer is responsible for suitable heat sinking
- Label on plastic bag (see example picture 2):
 - LASENCE®
 - G545D005-8x57.5-1.5-(15-35)-10
 - Lasence Order Number - Module Number
 - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)
- Laser Beam Warning Label on module housing (see example picture 1)
- With Remote control 6x3.5cm (see example picture 3) and sensor on the PCB.

- **Optional:**
- Shock
 - 1000g, 1ms, 6 shocks (3 axes, 2 shocks/axis)
- Vibration
 - 20 ~ 200Hz, 0.02g²/Hz (3 axes, 1h/axis)

Picture 1



Picture 2



Picture 3

