

Green Dot Laser Module

Wide Temperature Range

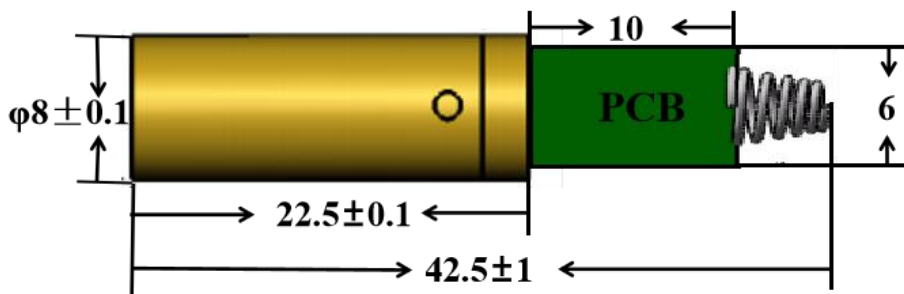


G545D005-8x42.5-1.5-(-30-50)-10

Features

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

Dimensions (Unit: mm)



Specifications				
Model Number		G545D005-8x42.5-1.5-(-30-50)-10		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	7.9	8	8.1
	Length (mm)	41.5	42.5	43.5
	Weight (g)	-	10	-
Housing Material		Brass		
Optical Specifications		Min	Typ	Max
Wavelength (nm) ⁽¹⁾		544	545	546
Output Power (mW)		1	3	5
Power Stability at const. Temperature ⁽²⁾		-	+/- 5%	+/- 10%
Output Power Mode		TTL(Duty Cycle Fixed)		
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⁾	-	8	10
Beam Diameter at Output Window (mm) ⁽⁴⁾		-	-	2.5
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⁾		-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) 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