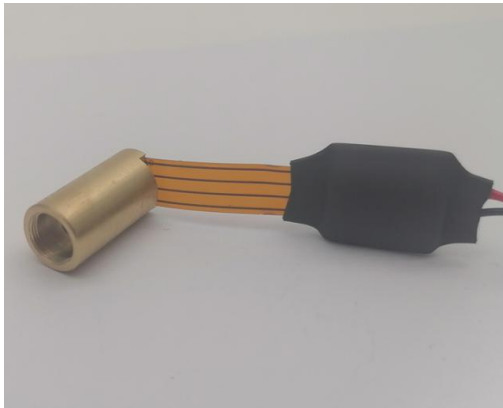


Green Laser Module

Wide Temperature Range



G545D005-1120-12.5-(-30-50)-10

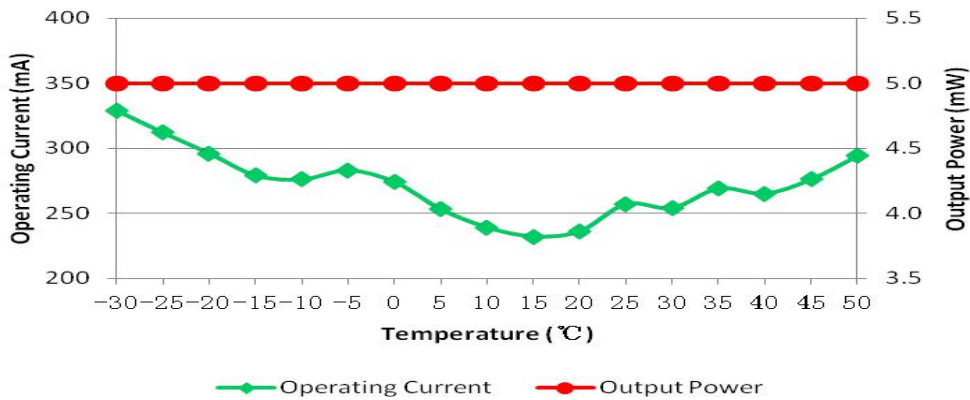
Applications

- Surveying Equipment
- Laser Alignment
- Laser Aiming

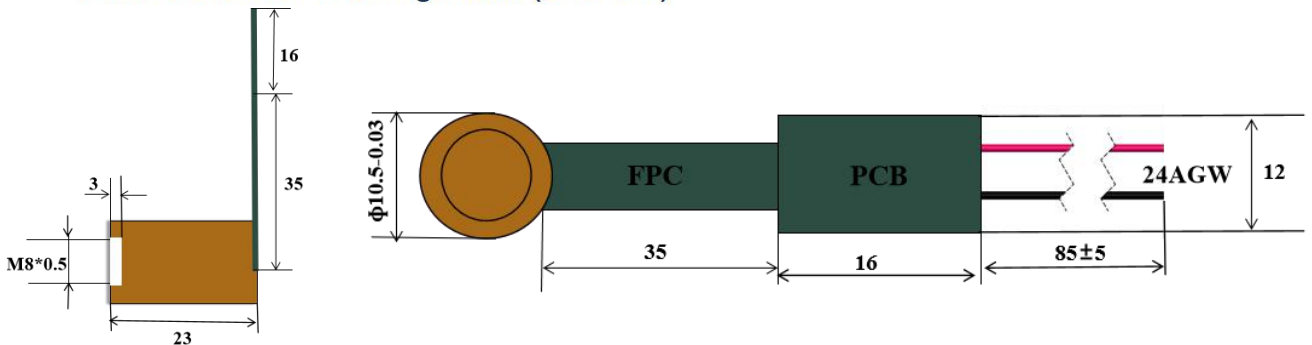
Features

- Wide Temperature Range
- Fast Rise Time
- Mini Size
- High Reliability

Typical Output Performance



Dimensions and Pin Configuration (Unit: mm)



Green Laser Module

Wide Temperature Range



Specifications

Model Number		G545D005-1120-12.5-(-30-50)-10			
Mechanical Specifications		Specs			Conditions
		Min	Typ	Max	
Laser Head	Diameter (mm)	10.47	10.48	10.5	
	Length (mm)	-	22.5	23	
	Weight (g)	-	-	7	
PCB/Driver	Length (mm)	15.5	16	16.5	
	Width (mm)	11.5	12	12.5	
Flexible Printed Circuit	Width (mm)	7.5	8	8.5	
	Length (mm)	34.5	35	35.5	
Optical Specifications					
Wavelength (nm)		543	545	547	
Output Power (mW)		-	5	-	
Power Stability at 25 °C		-	+/- 2%	+/- 5%	
Power Stability over operating temperature range		-	+/- 10%	+/- 20%	
Output Power Mode		-	CW	-	
Residual IR (%)		-	-	4%	
Beam Roundness		70%	-	100%	
Beam Quality (M2)		-	1.2	1.4	
Beam Diameter (mm)		-	0.1	-	At output window
Beam Divergence (mrad)		10	12.5	17	Full angle, 1/e ²
Beam Alignment Tolerance Position (Δr , mm)		-	0.3	0.5	At output window
Beam Alignment Tolerance Angle (mrad)		-	20	30	Full angle
Electrical Specifications		Min	Typ	Max	
Power Type		APC			
PCB Voltage (DC, V)		2	3.3	5	
PCB Operating Current (mA)		-	-	350	
Monitor Current (uA)		10	-	200	
Housing Isolation		No			
ESD protection		No			
Reverse Voltage Protection		YES			

Green Laser Module

Wide Temperature Range



Reliability				
Operating Case Temperature (°C)	-30	25	50	
Warm up time (secs)	-	0.2	0.5	to 75% of full power
Shock	1000 g , 1 ms , 6 shocks			3 axes , 2 shocks/axis
Vibration	20 ~ 2000 Hz , 0.02 g ² /Hz			3 axes , 1 hr/axis
Environmental Humidity (RH, %)	5	-	85	
Storage Temperature (°C)	-20	-	60	
Lifetime (hours)	5000	-	-	MTTF at 25 °C