

Green 545nm Laser Module

Wide Temperature Range

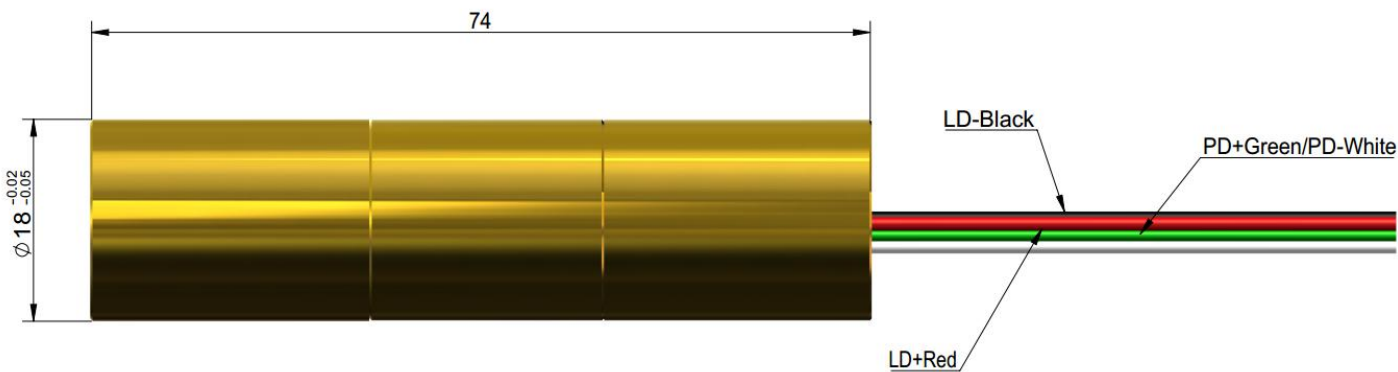


G545D50-18x75-1-00

Features

- DPSS Laser
- 50mW@545nm
- Wide Temperature Range
- Fast Rise Time
- High Reliability

Dimensions (Unit: mm)



Specifications				
Model Number		G545D50-18x75-1-00		
Mechanical Specifications		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Laser Head	Diameter (mm)	17.95	17.99	18
	Length (mm)	-	-	74
	Weight (g)	-	-	90
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⁾		35	50	65
Output Power Mode		CW		
Laser Class		3B		

⁽¹⁾ after max. 3 minutes

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	-	1
Beam Alignment Tolerance	Position (Δr , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	20	30
Beam Diameter at Output Window (mm)		-	12	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		Near TEM ₀₀		
Residual IR		-	-	1%
Electrical Specifications		Min	Typ	Max
Power Type		APC		
LD Voltage (DC, V)		1.8	2	2.6
LD Operating Current (mA)		-	1000	1500
Monitor Current (μ A)		190	375	500
Monitor Current Stability ⁽⁴⁾		-	+/- 10%	+/-25%
Housing Isolation		No		
ESD protection		No		
LD Wire Length (mm) ⁽²⁾		85(+/-5)		
LD Wire Type ⁽²⁾		20AWG		
PD Wire Length (mm) ⁽²⁾		85 (+/-5)		
PD Wire Type ⁽²⁾		28AWG		
Reverse Voltage Protection		No		
Reliability		Min	Typ	Max
Operating Case Temperature Range ($^{\circ}$ C)		-30	-	50
Rise Time (seconds) ⁽³⁾		-	0.5	1
Storage Temperature ($^{\circ}$ C)		-40	-	60
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at 25 $^{\circ}$ C)		5,000	-	-
RoHS Compliance Declaration		Yes		

(1) Full Angle ($1/e^2$)

(2) Can be customized.

(3) to 75% of full Output Power

(4) over temperature Range -30 $^{\circ}$ C to 50 $^{\circ}$ C