

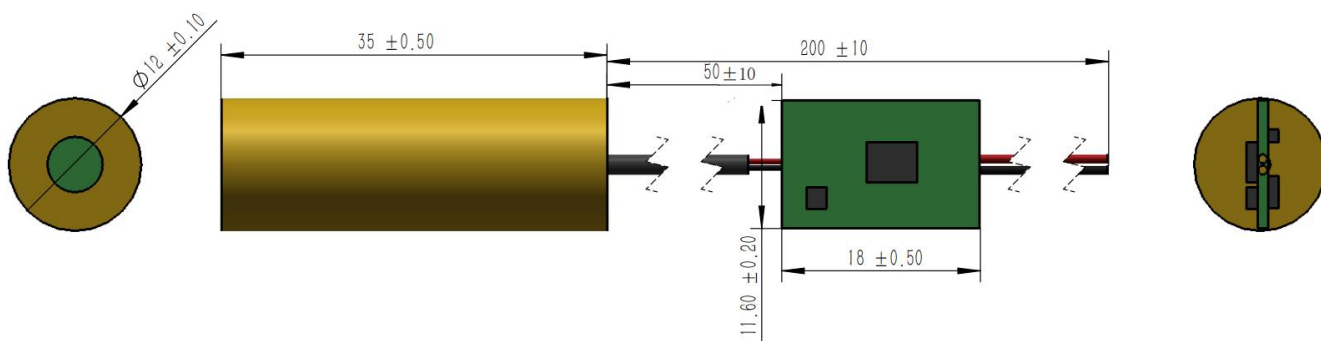


G545D050-12x35-0.8-(15-35)-50

Features

- Fast Rise Time
- High Reliability
- Green 545nm
- 12mm Diameter

Dimensions (Unit: mm)



Specifications

Model Number		G545D050-12x35-0.8-(15-35)-50		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	-	12.0	12.1
	Length (mm)	-	35	35.5
	Weight (g)	-	-	30
Housing Material		Brass		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		544	545	546
Output Power (mW) ⁽¹⁾		45	50	55
Power Stability at const. Temperature ⁽²⁾		-	+/- 5%	+/- 10%
Output Power Mode		CW		
Laser Class		3B		

(1) over Temperature Range of 15 to 35 °C

(2) after max. 3 minutes

Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾		-	0.6	0.8
Beam Alignment Tolerance	Position (Δr , mm) ⁽²⁾	-	0.3	0.5
	Off-axis Angle (mrad) ⁽³⁾	-	8	10
Beam Diameter at Output Window (mm)		-	-	5
Beam Diameter at distance 4m (mm)			3	5
Beam Roundness		70%	-	100%
Beam Mode Longitude		Multi		
Beam Mode Transverse		Near TEM00		
Polarization Ratio		-	NA	-
Residual IR (%)		-	-	1%
Electrical Specifications		Min	Typ	Max
PCB Type		APC-11.6*18		
Voltage (DC, V)		2.8	3	5.2
Operating Current (mA) at 5V ⁽⁴⁾		-	550	650
Housing Isolation		No		
ESD protection		No		
Wire Length (mm)		200 +/- 10		
Wire Type		UL 1007 22AWG ⁽⁵⁾		
Connector Model		None ⁽⁵⁾		
Reverse Voltage Protection		No		
Reliability		Min	Typ	Max
Operating Case Temperature Range (°C)		15	25	35
Rise Time (Seconds) ⁽⁶⁾		-	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) over Operating Case Temperature

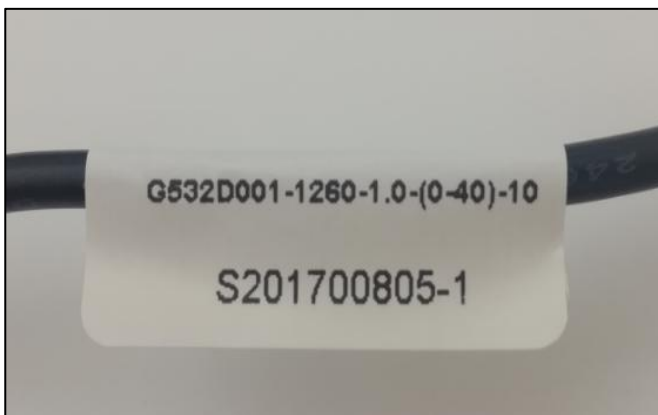
(5) Optional: Alternative Wire Types & Connector Models on demand

(6) to 75% of full Output Power

Remarks

- Datasheet Version: 1
- Reverse Voltage Protection
- Customer is responsible for suitable heat sinking
- Laser Beam Warning Label on module housing
- Label on plastic bag (see example of another product's label in picture 2):
 - LASENCE®
 - G545D050-12x35-0.8-(15-35)-50
 - Lasence Order Number - Module Number
 - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)
- **Optional:**
- Shock
 - 1000g, 1ms, 6 shocks (3 axes, 2 shocks/axis)
- Vibration
 - 20 ~ 200Hz, 0.02g²/Hz (3 axes, 1h/axis)
- Label around wires (see example of another product's label in picture 1):
 - G545D050-12x35-0.8-(15-35)-50
 - Lasence Order Number - Module Number
 - Label length: 30mm (+/-3mm)

Picture 1



Picture 2

