

# Green Dot Laser Module Wide Temperature Range

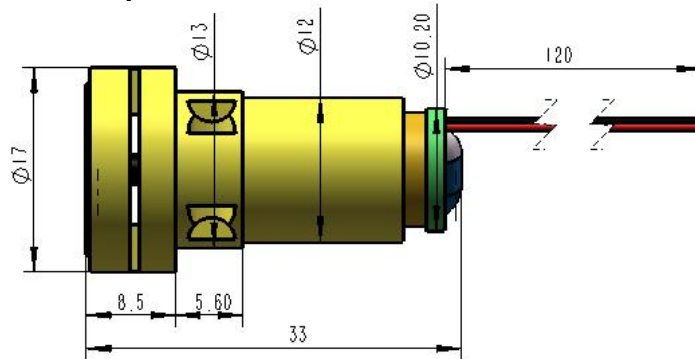


**G555D005-17x33-1-(-10-50)-10**

## Features

- Fast Rise Time
- High Reliability
- Isolated Housing
- Wide Temperature Range

## Dimensions (Unit: mm)



## Specifications

Model Number		G555D005-17x33-1-(-10-50)-10		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	16.9	17	17.1
	Length (mm)	32.9	33	33.1
	Weight (g)	-	11.6	-
Housing Material		Yellow Anodized Aluminum		
Optical Specifications		Min	Typ	Max
Wavelength (nm) <sup>(1)</sup>		551	555	559
Output Power (mW) at 25°C		1	3	6
Power Stability	at const. Temperature <sup>(2)</sup>	-	+/- 2%	+/- 5%
	over Temperature Range <sup>(2)</sup>		+/- 20%	+/- 33%
Output Power Mode		CW		
Laser Class		3R		

<sup>(1)</sup> over Operating Case Temperature Range

<sup>(2)</sup> after max. 3 minutes

<b>Beam Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Beam Divergence (mrad) <sup>(1)</sup>		-	0.8	1
Beam Alignment Tolerance	Position ( $\Delta r$ , mm) <sup>(2)</sup>	-	0.3	0.5
	Off-axis Angle (mrad) <sup>(3)</sup>	-	45	60
Beam Diameter at Output Window (mm)		-	6	8
Beam Diameter at 7m (mm)		-	3	5
Beam Roundness		70%	-	100%
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM <sub>00</sub>		
M <sup>2</sup>		-	1.2	1.4
Polarization Ratio		100:1	-	-
Residual IR (%)		-	-	1%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
PCB Type		ACC-TTL(50%-fixed, 110Hz)		
Voltage (DC, V)		2.6	-	3.0
Operating Current (mA) at 3V <sup>(4)</sup>		-	140	160
Housing Isolation		Yes		
ESD protection		No		
Wire Length (mm)		120 +/- 10		
Wire Type <sup>(5)</sup>		28AWG		
Connector Model <sup>(6)</sup>		None		
Reverse Voltage Protection		Yes		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating Case Temperature Range (°C) <sup>(7)</sup>		-10	-	50
Rise Time (Seconds) <sup>(8)</sup>		-	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) over Operating Case Temperature

(5) Optional: Alternative Wire Types on demand

(6) Optional: Alternative connector Models on demand

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

(8) to 75% of full Output Power