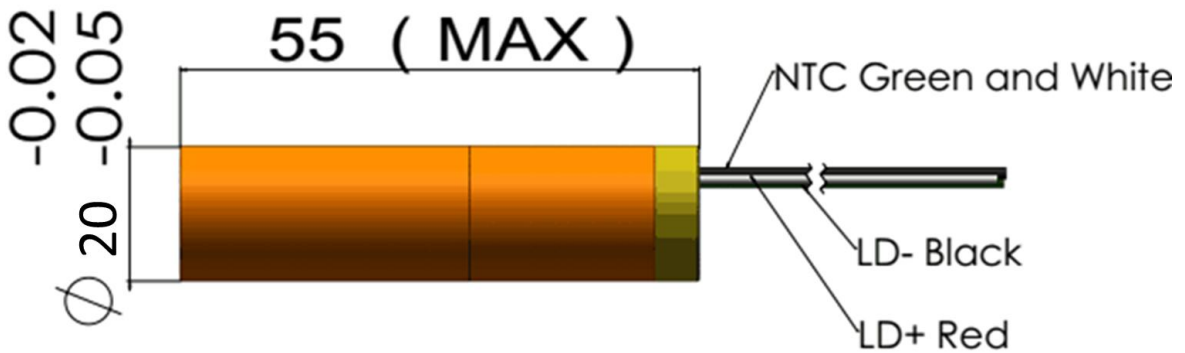


## G545D1500-20x55-50

### Features

- DPSS Laser
- with NTC
- Fast Rise Time
- High Reliability

### Dimensions (Unit: mm)



Specifications				
Model Number		G545D1500- 20x55-50		
<b>Mechanical Specifications</b>		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Laser Head	Diameter (mm)	19.95	20	20.05
	Length (mm)	-	-	55
	Weight (g)	-	-	200
Housing Material		Brass with gold-plating		
<b>Optical Specifications</b>		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Wavelength (nm)		543	545	547
Output Power (mW) at T <sup>(1)</sup> at 9 A		1500	-	-
Output Power (mW) from -30 to 50°C		400	-	-
Power Stability at const. Temperature <sup>(2)</sup>		-	+/- 2%	+/- 5%
Output Power Mode		CW		
Laser Class		4		

(1) see remarks in page 2 no# 4

(2) after max. 10 minutes

<b>Beam Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Beam Divergence (mrad) <sup>(1)</sup>		-	50	60
Beam Alignment Tolerance	Position ( $\Delta r$ , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	35	60
Beam Diameter at Output Window (mm)		-	0.8	
Beam Roundness		-	NA <sup>(2)</sup>	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM <sub>10</sub> <sup>(2)</sup>		
Polarization Ratio (Linear)		100:1	-	-
M <sup>2</sup>		-	-	50
Residual IR		-	-	1%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		ACC		
LD Voltage (DC, V)		2	2.3	2.7
LD Operating Current (mA) at 2V		-	9,000	10,000
Thermistor Constants		A = 2.231e <sup>-3</sup> B = 4.694e <sup>-5</sup> C = 0.884e <sup>-6</sup>		
Thermistor Resistance		6.6K $\Omega$ @35 $^{\circ}$ C    8.2K $\Omega$ @30 $^{\circ}$ C 10.0K $\Omega$ @25 $^{\circ}$ C    12.3K $\Omega$ @20 $^{\circ}$ C 16.4K $\Omega$ @15 $^{\circ}$ C    18.5K $\Omega$ @10 $^{\circ}$ C		
Power Consumption (W)		-	20.7	27
Housing Isolation		No		
ESD protection		No		
Wire Length (mm) <sup>(3)</sup>		200 (+/-50)		
Wire Type <sup>(3)</sup>		20AWG / 28AWG		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating NTC Temperature Range ( $^{\circ}$ C)		T+0.3	T <sup>(4)</sup>	T-0.3
Storage Temperature ( $^{\circ}$ C)		0	-	40
Environmental Humidity (RH, %)		5	-	85
Lifetime (hours) (MTTF at T <sup>(4)</sup> )		5,000	-	-
RoHS Compliance Declaration		Yes		

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

(2) See picture 5 on page 3 for example of beam spot

(3) Wire Length can be customized. 20AWG for LD wires. 28AWG for NTC wires.

(4) T is one optimum LD operating temperature between 25 to 30 $^{\circ}$ C reflected by NTC resistance and will be advised in each test report.