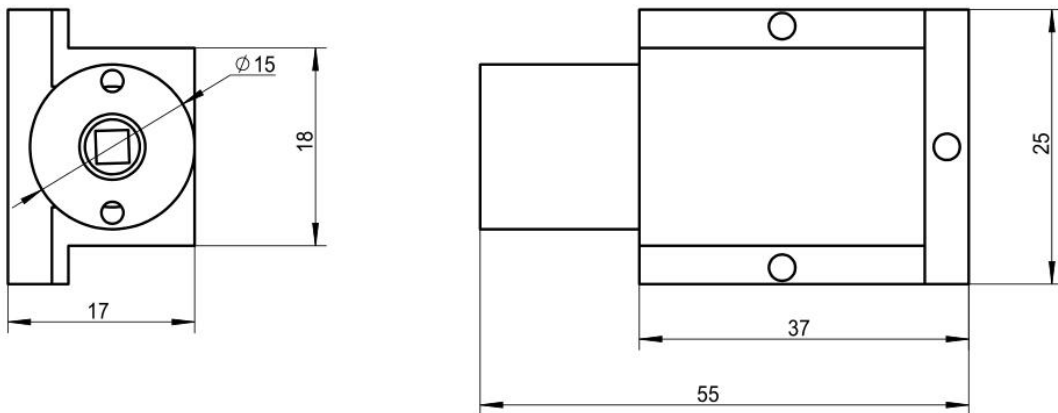


## Y577D1000-25x17x55-40

### Features

- DPSS Laser
- Yellow Laser
- High Power
- Fast Rise Time

### Dimensions (Unit: mm)



### Specifications

Model Number		Y577D1000-25x17x55-40		
Mechanical Specifications		Min	Typ	Max
Laser Head	Width x Height (mm)	25X16	25X17	26X18
	Length (mm)	-	-	55
	Weight (g)	-	-	200
Housing Material		Brass with gold-plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		570	577	580
Output Power (mW) at T <sup>(1)</sup> at 10A		800	-	-
Spectral Bandwith (nm)		-	-	1
Power Stability at const. Temperature <sup>(2)</sup>		-	+/- 5%	+/- 10%
Output Power Mode		CW		
Laser Class		4		

<sup>(1)</sup> see remarks 3 in page 2

<sup>(1)</sup> after max. 3 minutes

<b>Beam Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Beam Divergence (mrad) <sup>(1)</sup>		-	40	50
Beam Alignment Tolerance	Position ( $\Delta r$ , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	35	60
Beam Diameter at Output Window (mm)		-	0.5	
Beam Roundness		-	NA <sup>(5)</sup>	-
Beam Mode Longitude		Multi		
Beam Mode Transverse		TEM <sub>n</sub> 1 <sup>(5)</sup>		
Polarization Ratio (Linear)		100:1	-	-
M <sup>2</sup>		-	NA	-
Residual IR		-	-	3%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		ACC		
LD Voltage (DC, V)		1.8	2	2.3
LD Operating Current (mA) at 2V		-	10,000	12,000
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) at 25 $^{\circ}$ C		-	20	27.6
Housing Isolation		No		
ESD protection		No		
Wire Length (mm)		200 (+/-50)		
Wire Type <sup>(2)</sup>		20AWG / 28AWG		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating NTC Temperature Range ( $^{\circ}$ C) <sup>(3)</sup>		T-0.1	T	T+0.1
Rise Time (mins) at 10A <sup>(4)</sup> (at T)		-	8	10
Storage Temperature ( $^{\circ}$ C)		0	-	40
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) 20AWG for LD wires. 28AWG for NTC wires

(3) T is one optimum LD operating temperature between 15 to 35 $^{\circ}$ C reflected by NTC resistance and will be advised in each test report.

(4) to 50% of full Output Power. Dot (~10mW) can be seen after 0.2s if >1A

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

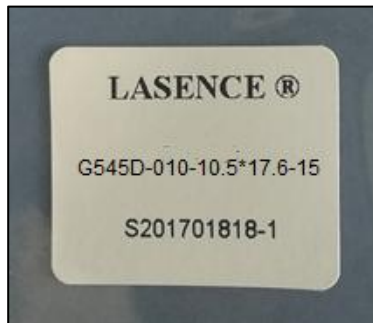
## Remarks

- Product ID for placing orders:Y577D1000-25x17x55-40
- Datasheet Version: 1
- No Photodiode
- Customer is responsible for suitable heat sinking
- Label on plastic bag (see picture of another product's label in picture 2):
  - LASENCE®
  - Y577D1000-25x17x55-40
  - Lasence Order Number - Module Number
  - Label Length: 30mm (+/-3mm); Width: 25mm (+/-3mm)
- Anti-static protector for transportation (see picture 4)
- Example of beam spot (see picture3)
- Laser Beam Warning Label on module housing (see picture 1)

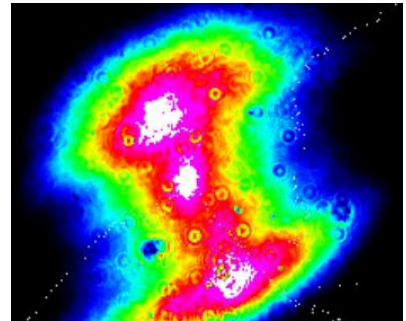
### Picture 1



### Picture 2



### Picture 3



### Picture 4

