



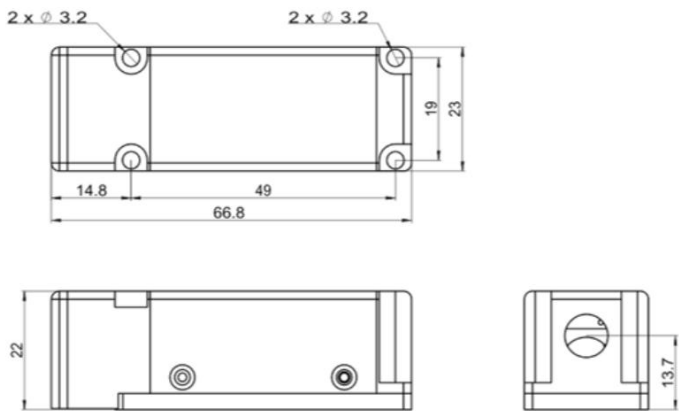
R638D050-66.8x23x22-V2

Applications

- Life Science
- Scientific Experiment
- Optical Instrument
- Medical Imaging & Instrument

Dimensions (Unit: mm)

Laser Head:



Specifications

Specifications				
Model Number		R638D050-66.8x23x22-V2		
Mechanical Specifications		Min	Typ	Max
Laser Head	Width x Height (mm)	-	23*22	-
	Length (mm)	-	66.8	-
	Weight (g)	-	-	100
Housing Material		Grey Anodized Aluminum		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		635	638	641
Output Power (mW)		-	50	-
Spectral width(nm)		-	2	-
Power Stability at const. Temperature ⁽¹⁾		-	1%	-
Noise(10Hz-2MHz, 5s)		-	-	0.1%
Output Power Mode		CW		
Laser Class		3B		

⁽¹⁾ RMS 8 hours: after warm-up time

Edge mold cut-off degree		OD4		
Polarization direction deviation (vertical direction)		-3°	-	3°
Beam Specifications		Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾	horizontal direction(mrad)	-	0.3	-
	vertical direction(mrad)	-	0.5	-
Spot size ⁽²⁾	horizontal direction(mm)	3.8	4.3	4.8
	vertical direction(mm)	1.7	2.0	2.3
Beam Alignment Tolerance	Position (Δr , mm) ⁽³⁾	-	-	0.5
	Off-axis Angle (mrad)	-	-	2.5
Beam Height from Base Plate (mm)		-	13.7	14
M ²		-	1.3	-
Polarization Ratio (Linear)		100:1	-	-
Electrical Specifications		Min	Typ	Max
Operating Voltage (DC, V)		12		
Operating Current (A) at 12V		2		
Laser Drive Size ⁽⁴⁾	Width x Height (mm)	-	35*38.5	-
	Length (mm)	-	66.7	-
	Weight (g)	-	-	200
Reliability		Min	Typ	Max
Operating Condition (°C) ⁽⁵⁾		15	25	35
Warm-up Time (minutes)		-	-	2
Storage Temperature (°C)		-20	-	60
Environmental Humidity (RH, %)		10	-	90
Lifetime (hours) (MTTF at 25°C)		5,000	-	10000

(1) Full Angle (1/e²)

(2) At a working distance of 300mm(1/e²)

(3) at Output Window

(4) See page 3

(5) The laser head needs to be used on a heat sink (baseplate) with good heat dissipation and 15 to 35°C is the baseplate temperature.

Laser Driver

