

B450nm Diode Laser

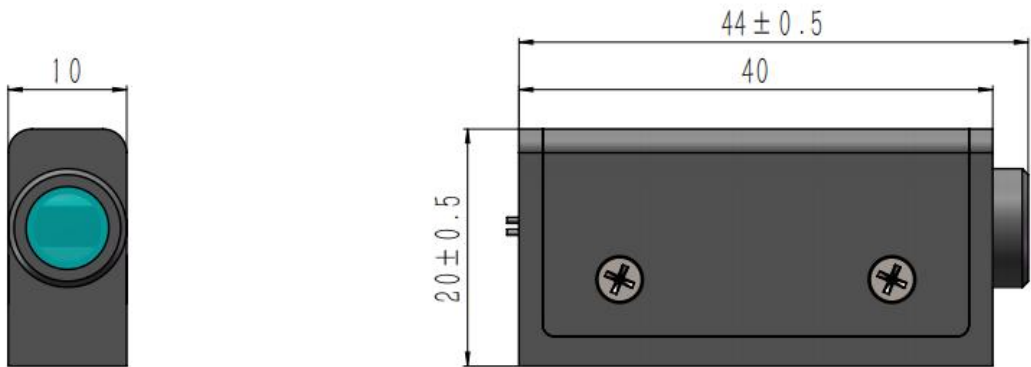


B450D050-40x20x10-1.0

Applications

- Life Science
- Scientific Experiment
- Optical Instrument
- Medical Laser

Dimensions (mm)



Specifications				
Model Number		B450D050-40x20x10-1.0		
Mechanical Specifications		Min	Typ	Max
Laser Head (without Control System)	Width x Height (mm)	19.5x9.5	20x10	20.5x10.5
	Length (mm)	43.5	44	44.5
	Weight (g)	-	60	70
Housing Material		Brass		
Optical Specificaitons		Min	Typ	Max
Wavelength (nm)		445	450	455
Bandwidth (nm)		-	-	2
Output Power (mW)		45	50	55
PK-PK Power Stability (25°C, 1h)		-	1%	3%
RMS Noise (10MHz, 5s)		-	0.1%	0.5%
Output Power Mode		CW		
Laser Class		3b		

Beam Specifications		Min	Typ	Max
Beam Divergrnce (mrad) ⁽¹⁾		0.3	-	0.5
Beam Dimensions	Horizontal (mm)	4.0	5.5	6
	Vertical (mm)	2.0	2.5	2.7
M ²		1.3	-	1.7
Side-Mode Suppression Ratio (Beam Side Lobes)		-	-	3%
Returned Beam Isolation (dB)		40	-	60
Electrical Specificatons		Min	Typ	Max
Operating Voltage (V)		DC12V		
Operating Current (A)		2A		
Power Type		APC		
Output Power Control		Without (can be customized)		
Power Supply		12V-2A Adapter		
Electric Control Module Dimensions (without Adapter)	Width x Height (mm)	-	65*65	-
	Length (mm)	-	90	-
	Weight (g)	-	320	-
Reliability		Min	Typ	Max
Operating Temperature (°C)		10	25	40
Warm-up Time (minutes)		-	2	5
Storage Temperature (°C)		0	-	50
Environmental Humidity (RH, %)		5	-	85
Lifetime (h) ((MTTF at 25°C)		5,000	-	10000

⁽¹⁾ Full Angle (1/e²)

Power Stability (25°C, 1h)

