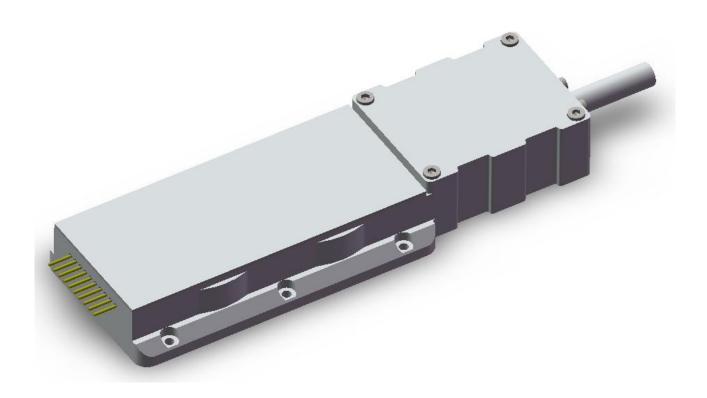


B-Series High Power Laser Diode Module

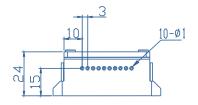


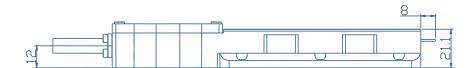
- **Features** ♦ High output power of 50 W
 - ♦ 100µm/0.22NA multimode optical fiber
 - ◆ Center wavelength 450±10nm
- **Applications** ♦ Industrial Processing
 - **♦** Lighting

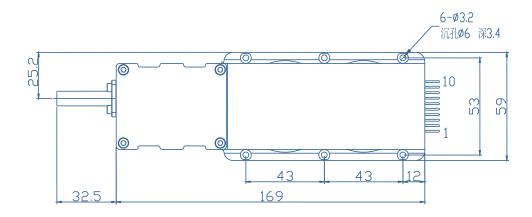


M450±10-50-F100/22-B50-AP

Package Dimensions (mm)







Pin-out Assignment				
Pin	Function			
1	LD1 (+)			
2	LD1 (-)			
3	Aiming Beam (+5V)*			
4	Aiming Beam (0V)			
5	Thermistor			
6	Thermistor			
7	PD(N)			
8	PD(P)			
9	LD2 (+)			
10	LD2 (-)			

^{*}Optional built-in constant power circuit, 5V power supply needed.



M450±10-50-F100/22-B50-AP

Typical Device Performance (20°C)

	Min	Typical	Max	Unit
Optical			1	1
CW Output Power	-	50	-	W
Center Wavelength	-	450±10	-	nm
Spectral Width (90% of Power)	-	4.0	-	nm
Electrical*			'	'
Threshold Current	-	0.3	-	А
Operating Current	-	3.0	-	Α
Operating Voltage (Single Channel)	-	33	-	V
Slope Efficiency (Single Channel)	-	9.2	-	W/A
Power Conversion Efficiency		25	-	%
Aiming laser **				
CW Output Power	-	2	-	mW
Center Wavelength	-	650±10	-	nm
Operating Current	-	<30	-	mA
Operating Voltage	-	5	-	V
Fiber***		·		
Fiber Core Diameter	-	100	-	μm
Fiber Cladding Diameter		500		μm
Fiber Buffer Diameter		1300		μm
Numerical Aperture	-	0.22	-	-
Fiber Length	-	1~5	-	m
Fiber Connector	-	D80/SMA905	-	-
Cooling parameters				
Refrigeration Demand	-	-	300	W
Refrigeration Method	Water Cooling/Air Cooling			

^{*2} groups of LD assembled inside the module, and the operating voltage and slope efficiency of each groups are basically the same.

^{**}Aiming laser: Optional built-in constant power circuit, 5V power supply needed. The operating voltage of 650nm red light is 5V and 515nm green light is 9V.

^{***} Customized fiber and connector available.



M450±10-50-F100/22-B50-AP

Absolute Ratings

	Min	Max	Unit
Operating Temperature	15	35	$^{\circ}$
Operating Relative Humidity	-	75	%
Storage Temperature	-20	80	°C
Storage Relative Humidity	-	90	%

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