

# RLS/BA-Series Butterfly Laser Diode Mount Kit

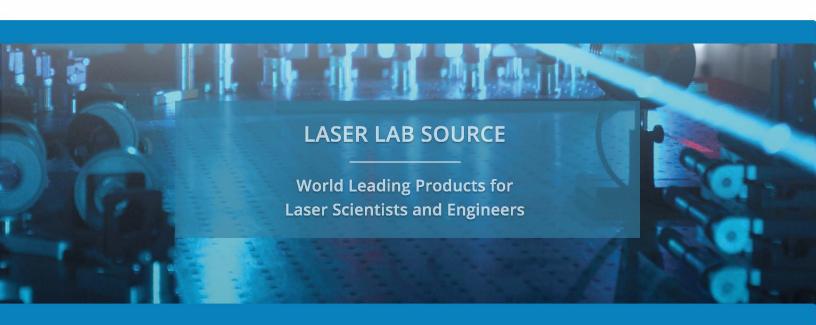
Easy-To-Use Butterfly Mounting Kit

Integrates with our TEC-Cooled OCP-050 Heat Sink

Two Wiring Configurations Available:

- BA-01 for Pump Lasers
- BA-02 for Universal Versatility

Cost-Effective, Time-Saving Solution for R&D and Test Lab Laser Fixturing



The Model BA-01 and BA-02 Universal Butterfly Mounts Kits provide electrical connections and flush mount standard butterfly packages to a cold plate or heat sink. The BA-Series mount kits interface directly with the Elite Thermal Engineering OCP-050, thermoelectric cold plate/heat sink assemblies. (The OCP-050 can be ordered with two BA-Series mount kits under part number DBC-050A.)

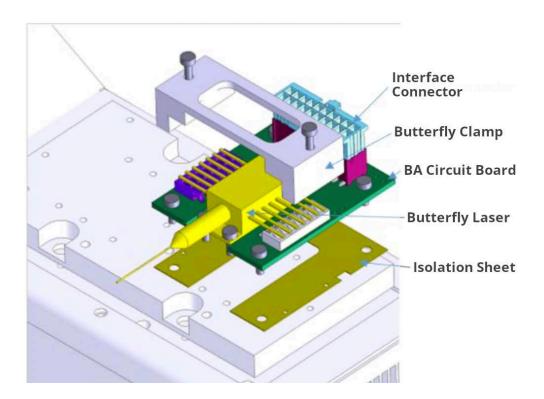
Two models of the BA-Series are available:

- BA-01 is prewired for standard pump laser pinouts to the 20-pin connector at the end of PCB, and provides reverse bias protection for laser diode.
- BA-02 routes all butterfly connections to the 20-pin connector at the end of PCB, making it an universal butterfly adapter.

The zero insertion force (ZIF) electrical PCB headers are spring loaded to maintain robust electrical continuity when compressed by the butterfly clamp. The height of the electrical contacts matches the height of butterfly pins, causing no stress to the pins while maintaining robust electrical contact.

An electrical isolation sheet is provided to ensure electrical isolation between the circuit board and the heat sink mounting surface.

All mounting hardware is included (2-56 screws) to mount the circuit board, butterfly laser, and the clamp to a heat sink or cold plate.





### **BA-01 Pin Configuration**

The table below details the electrical connection of the BA-01 mount kit. Please note that only the butterfly packages that match the pin configuration listed below can be used with BA-01. Users are recommended to check the butterfly pinout carefully before making the connections. Butterflies that offer pin outs that differ from the table below should use BA-02.

20 pin connector	Butte	rfly ZIF header	Plated holes for soldering wires	Rated current (A)
1	5	thermistor		1
2	4	PD cathode -		1
3	3	PD anode +		1
4	2	thermistor		1
5	1	TEC +		6
6			J6 Cold plate	1
			thermistor	
7			J6 Cold plate	1
			thermistor	
8	14	TEC -		6
9	13	Case ground		1
10		N/C		1
11	11	Laser cathode -		4
12	11	Laser cathode -		4
13	10	Laser Anode +		4
14	10	Laser Anode +		4
15			J4 Cold plate fan +	1
16			J4 Cold plate fan -	1
17			J5 Cold plate TEC +	1
18			J5 Cold plate TEC +	1
19			J5 Cold plate TEC -	1
20			J5 Cold plate TEC -	1
	6, 7, 8, 9, 10, 12			
	Not connected			

The header on the BA-01 printed circuit board includes connections for the fan, thermistor, and TEC module on the OCP-050 heatsink assembly.

The connector for user interface is SAMTEC IPL-1-110-02-S-D, the mating connector is SAMTEC IPD1-10-D-K. SAMTEC offers value-add service for the related cable assembly.



## **BA-02 Pin Configuration**

The table below details the electrical connection of the BA-02 mount kit. The BA-02 kit allows butterfly lasers of any pin configuration to be used.

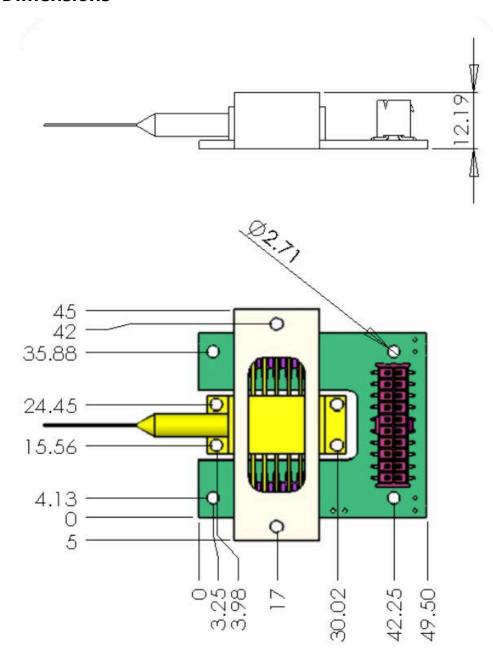
20 pin	Butterfly ZIF	Plated holes for	Rated
connector	header	soldering wires	current
			(A)
1	1		9
2	2		4
3	3		4
4	4		4
5	5		4
6	6		4
7	7		4
8	8		4
9	9		4
10	10		4
11	11		4
12	12 by shorting	J4 fan + w/pin# 2 & 4	4
	pin #2 & 4 of J7	of J7 open	
13	13 by shorting	J4 fan - w/pin#1 & 3	4
	pin#1 & 3 of J7	of J7 open	
14	14		9
15		J4 Cold plate fan +	5
16		J4 Cold plate fan -	5
17		J6 Cold plate	4
		thermistor	
18		J6 Cold plate	4
		thermistor	
19	1	J5 Cold plate TEC -	9
20	14	J5 Cold plate TEC -	9

The header on the BA-02 printed circuit board includes connections for the fan, thermistor, and TEC module on the OCP-050 heatsink assembly.

The connector for user interface is SAMTEC IPL-1-110-02-S-D, the mating connector is SAMTEC IPD1-10-D-K. SAMTEC offers value-add service for the related cable assembly.



## **BA-0X Dimensions**



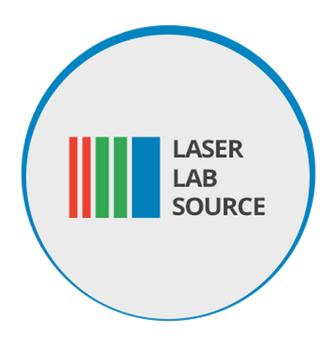
BA-0x mounting pattern (mm)

#### **PRODUCT SALES AND SERVICE:**

Orders for this product are fullfilled by LaserDiodeControl.com, part of the Laser Lab Source marketplace group. It is manufactured for sale on Laser Lab Source by elite thermal engineering.

#### **PRODUCT WARRANTY:**

This product is sold with a full one year warranty. It is warrantied to be free from defects in material and/or workmanship for a period of one year from the date of shipment.



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