



## 940nm Butterfly Laser Diode Single Mode Fiber, 200mW Output



### **940D-1-0-0 / LASER-DIODE**

- o 940nm  $\pm$ 5nm Output
- o 200mW Output Power
- o Single Mode Fiber-Coupled
- o Integrated Photodiode, TEC, Thermistor
- o FC/APC Connectorized
- o Polarization-Maintaining Fiber Available

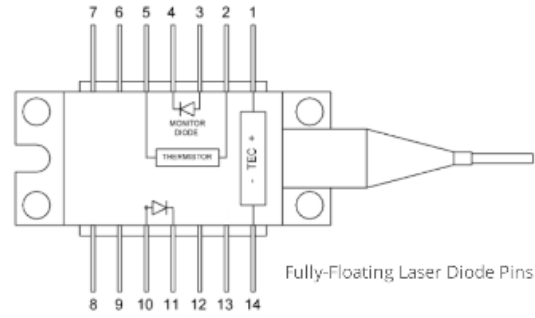


## 940NM SINGLE MODE FIBER-COUPLED LASER DIODE

These single-mode 940nm lasers deliver up to 200mW output power via single-mode fiber; polarization-maintaining fiber is available optionally. The internal photodiode, thermistor, and TEC ensure stable operating over long operating life-times, and in a wide variety of application environments.

The 940nm laser diode is also available packaged in a preconfigured laser source system with built in mount, control electronics, and remote user interface.

### Butterfly Laser Type-1 Pinout



1	TEC (+)	8	NC
2	Thermistor	9	NC
3	PD Anode (+)	10	LD Anode (+)
4	PD Cathode (-)	11	LD Cathode (-)
5	Thermistor	12	NC
6	NC	13	Case Ground
7	NC	14	Thermistor (-)

## 940LD-1-0-0 / LASER-DIODE GENERAL SPECIFICATIONS

### Optical Specifications

Wavelength: 940 nm  $\pm$ 5 nm  
 CW Output Power: 200 mW  
 Emission Bandwidth: < 1 nm  
 Wavelength Shift w/Temperature: 0.3 nm/ $^{\circ}$ C  
 Wavelength Shift w/Current: 5 nm/A

### Optical Specifications with Optional FBG

Center Wavelength: 940 nm  $\pm$ 1 nm  
 Emission Bandwidth: < 0.2 nm  
 Wavelength Shift w/Temperature: 0.005 nm/ $^{\circ}$ C  
 Emission Bandwidth: < ~0 nm  
 SMSR: 20 dB (typ)

### Electrical Specifications

Threshold Current: 40 mA (typ)  
 Operating Current: 400 mA (typ)  
 Operating Voltage: 1.8 V (typ)  
 Max LD Reverse Voltage: 2 V  
 TEC Current \*: 1.1 A (max)  
 TEC Voltage \*: 1.9 V (max)  
 Thermistor: 10 kOhm (@ 25 $^{\circ}$ C)  
 \* Chip Temperature 25 $^{\circ}$ C, Case 70 $^{\circ}$ C  
 Photodiode Responsivity: 3 mA / A (typ)  
 Photodiode Dark Current: 5 nA

### Fiber Pigtail

Single Mode HI1060  
 PM980 Polarization Maintaining Fiber Available Optionally  
 FC/APC Connector

### General Specifications

Storage Temperature: -40 $^{\circ}$ C – 85 $^{\circ}$ C  
 Operating Case Temperature: -20 $^{\circ}$ C – 70 $^{\circ}$ C  
 Operating Chip Temperature: 20 $^{\circ}$ C – 40 $^{\circ}$ C



Offered by  
**LASER LAB SOURCE**



**LASER  
DIODE  
SOURCES**

## **PRODUCT SALES AND SERVICE:**

Unlimited phone and email support is provided for products purchased through Laser Lab Source. Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by AeroDIODE, Talence, France.

## **PRODUCT WARRANTY:**

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



Laser Lab Source, a division of Research Lab Source, Inc.  
670 S. Ferguson St., Suite 3  
Bozeman, MT 59718 USA

Phone: 406-219-1472

[www.LaserLabSource.com](http://www.LaserLabSource.com)

Aero**DIODE**