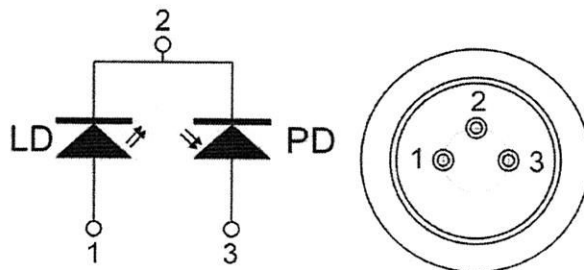


## Details

### Internal Circuit



Cathode grounded – laser current **positive**

Pin1: LD Anode  
Pin2: Common, GND  
Pin3: PD Anode

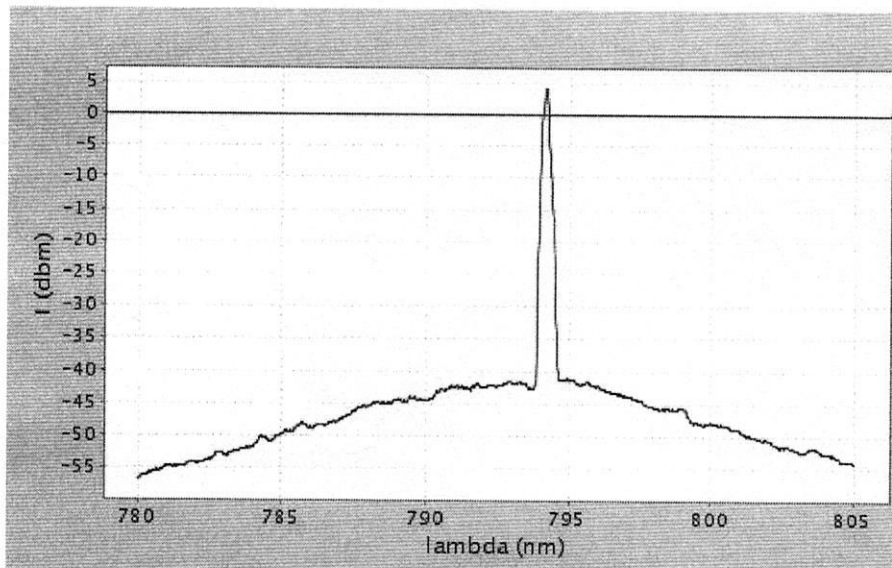
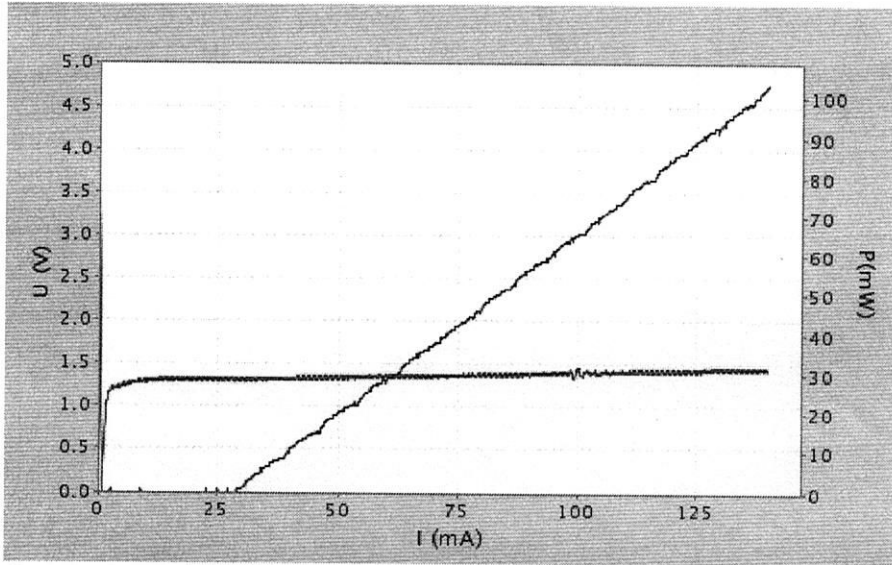
### Absolute Maximum Ratings (T<sub>c</sub>=20.0°C)

Item	Symbol	Value	Unit
Optical Output Power	P <sub>o</sub>	150.0	mW
Operating Temperature	T <sub>op</sub>	15.0 to 40.0	°C

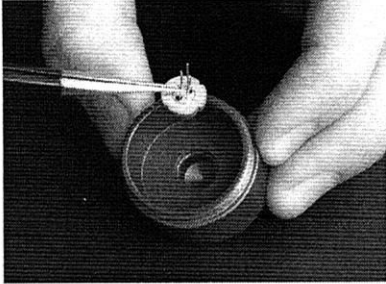
### Optical and Electrical Characteristics (T<sub>c</sub>=20.0°C)

Item	Symbol	Min	Typ	Max	Unit	Testconditions
Threshold Current	I <sub>th</sub>	-	30.0	50.0	mA	-
Operating Current	I <sub>op</sub>	-	200.0	250.0	mA	P <sub>o</sub> =-mW
Operating Voltage	V <sub>op</sub>	-	2.0	2.2	V	P <sub>o</sub> =-mW
Slope Efficiency	η <sub>s</sub>	0.8	0.9	1.0	W/A	-
Lasing Wavelength	λ <sub>p</sub>	790.0	795.0	800.0	nm	P <sub>o</sub> =-mW

## Curve Characteristics

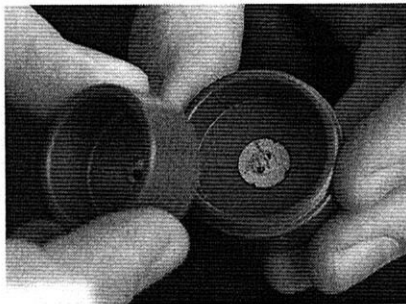
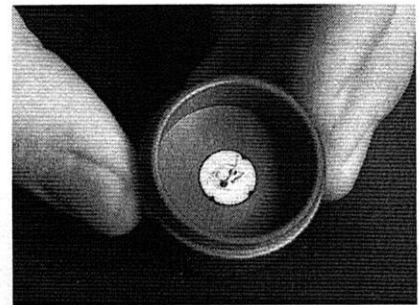


## Packing of Laserdiode



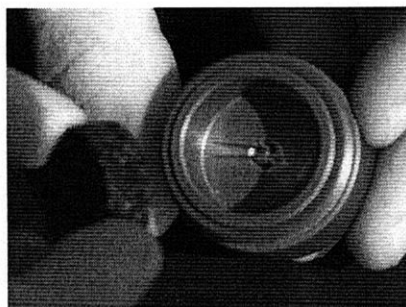
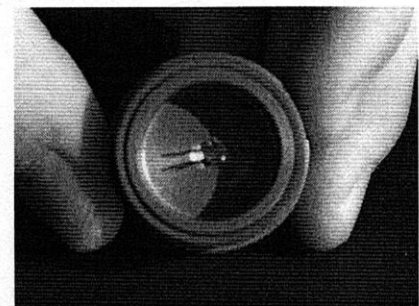
1. Place the diode (pins upwards) into the dent at the bottom of the container.

2. There are two different lower parts: For diodes with a diameter of 5.6 mm and for diodes with a diameter of 9 mm.



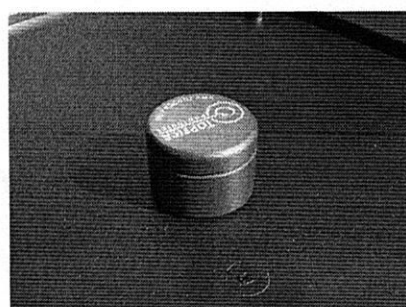
3. Put the insert (as shown at the picture) over the pins of the diode.

4. Press the insert carefully till the stud. Now the top edge of the insert must be in the same level like the top edge of the lower part.



5. Press the conductive ESD foam over the diode pins very carefully.

6. Press the conductive foam total into the insert. Avoid bending of the diode pins!



7. Finally screw the cover again.

## Instruction for Handling of the TOPTICA Diode Laser Container

### General recommendations

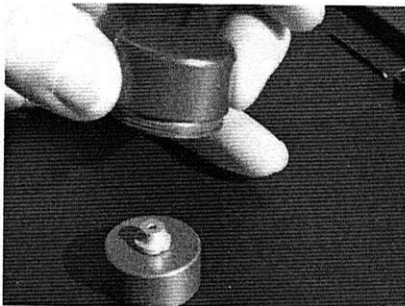
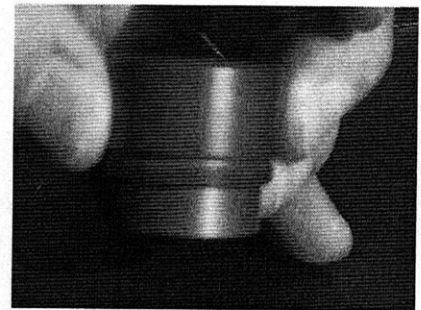
Laser diodes are Electrostatic Sensitive Devices. Please pack and unpack them only at a qualified ESD place of work. Make sure that you are grounded, use only ESD tools e.g. ESD tweezers.

### *Unpacking of Laserdiode*



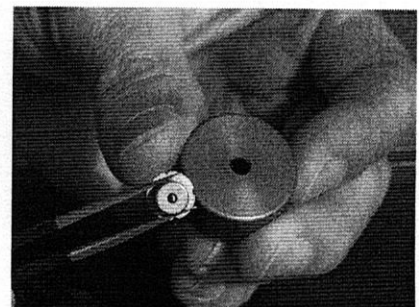
1. Unscrew the cap of the container.

2. Keep the container horizontal, headfirst and close by the surface of the table.



3. The insert of the container will slowly slide out inclusive the diode.

4. Use the tweezers and pull the diode out of the insert.  
In case you are not able to install the diode immediately, it is recommended to take the black conductive ESD foam and put it onto the diode pins.



# Laser Diode Data Sheet



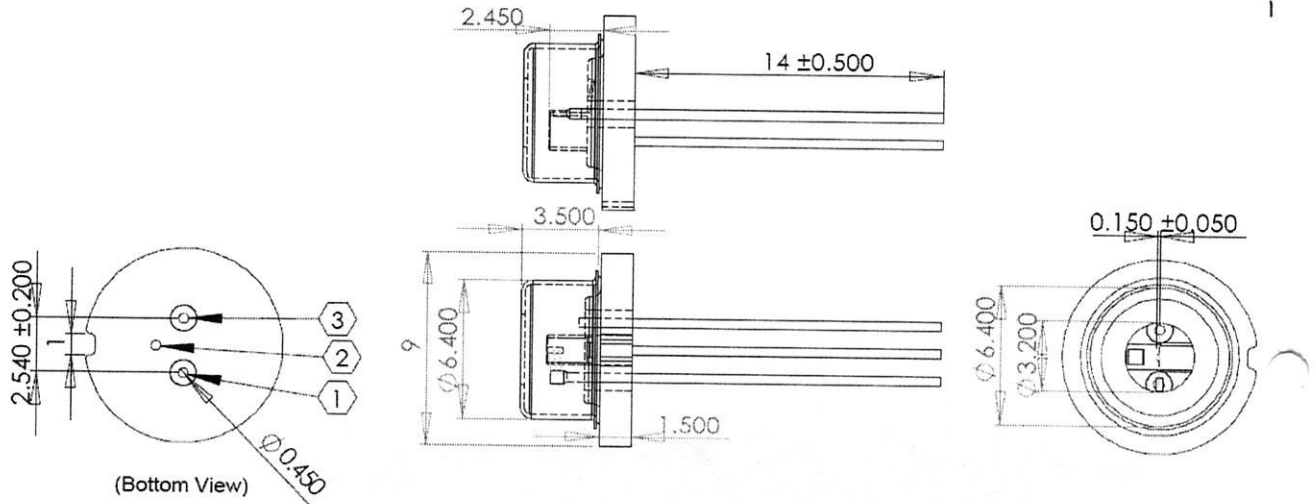
QM-Form: F-025

Date Form: 12.02.10

Version: 05

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## Package Dimensions



# Laser Diode Data Sheet



QM-Form: F-025

Date Form: 12.02.10

Version: 05

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## Actual Data Sheet for Laser Diode with Serial Number 082409\_33

(Condition: 150.0mW @ -°C)

Item	Symbol	Value	Unit
Threshold Current	$I_{th}$	38.108	mA
Operating Current	$I_{OP}$	182.43	mA
Operating Voltage	$V_{OP}$	1.89	V
Slope Efficiency	$\eta_s$	1.053	W/A
Light Output Power	$P_O$	150.0	mW
Center Wavelength	$\lambda_p$	794.99	nm

## Semiconductor Laser Diode

**#LD-0795-0150-2**

**S/N: 082409\_34**

### General

#### Description

The #LD-0795-0150-2 offers high cw optical power combined with industry leading reliability. The front facet is passivated. Therefore it is well suited for the high intracavity power in an external cavity setup.

#### Application

Spectroscopy (Rb)

#### Features

In our optimized external cavity we can offer 120 mW at the output (in older versions of DL 100 and other ECDLs we can not specify the output power - please inquire if your DL 100 is suitable)

The diodes are selected to reach Rb 794.76 nm

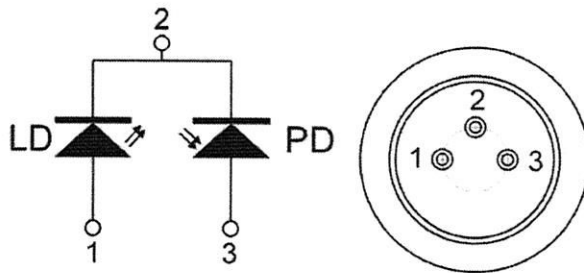
Article-No.: #LD-0795-0150-2  
Serial No.: 082409\_34

Datasheet: 1v2\_rha  
Date: 25.07.2006



## Details

### Internal Circuit



Cathode grounded – laser current **positive**

Pin1: LD Anode  
Pin2: Common, GND  
Pin3: PD Anode

### Absolute Maximum Ratings (T<sub>c</sub>=20.0°C)

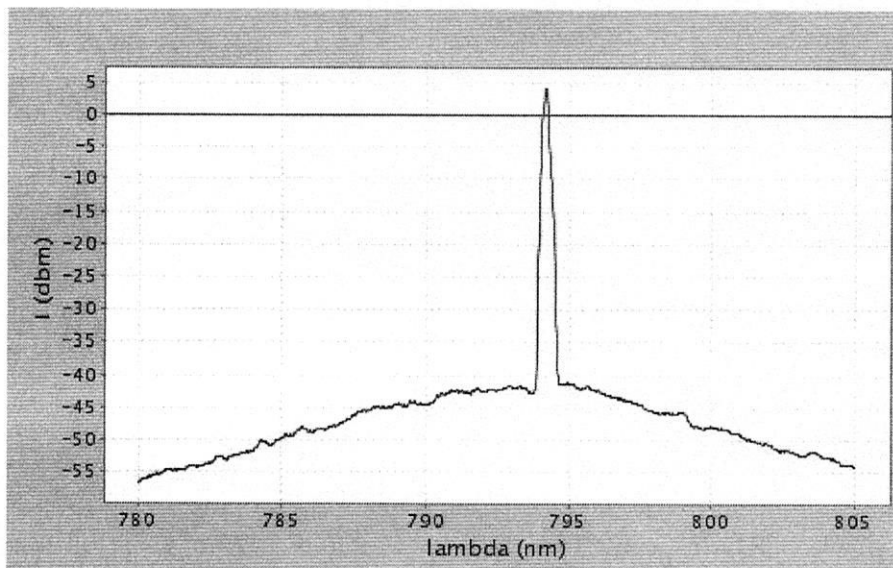
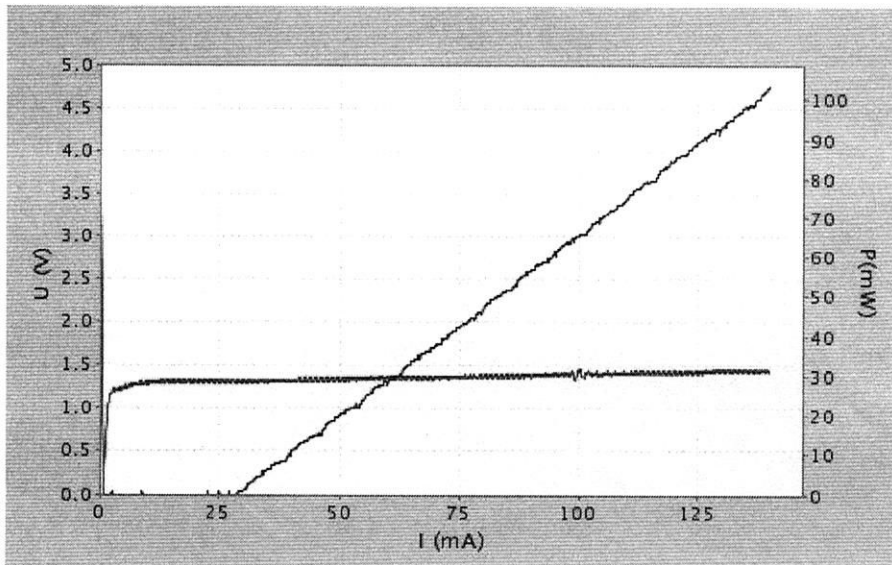
Item	Symbol	Value	Unit
Optical Output Power	P <sub>o</sub>	150.0	mW
Operating Temperature	T <sub>op</sub>	15.0 to 40.0	°C

### Optical and Electrical Characteristics (T<sub>c</sub>=20.0°C)

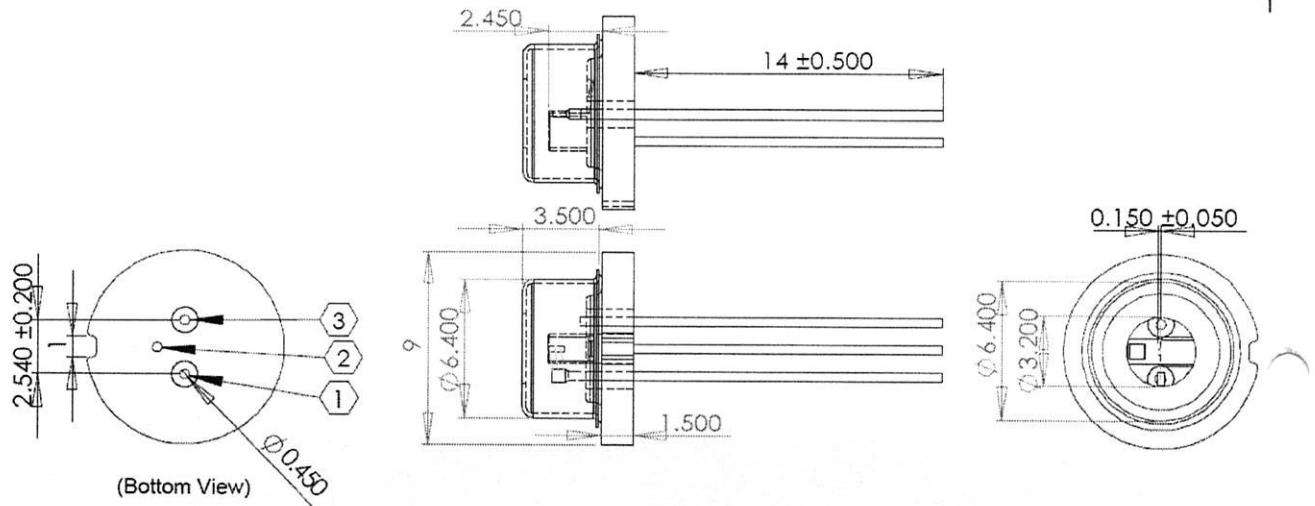
Item	Symbol	Min	Typ	Max	Unit	Testconditions
Threshold Current	I <sub>th</sub>	-	30.0	50.0	mA	-
Operating Current	I <sub>op</sub>	-	200.0	250.0	mA	P <sub>o</sub> =-mW
Operating Voltage	V <sub>op</sub>	-	2.0	2.2	V	P <sub>o</sub> =-mW
Slope Efficiency	η <sub>s</sub>	0.8	0.9	1.0	W/A	-
Lasing Wavelength	λ <sub>p</sub>	790.0	795.0	800.0	nm	P <sub>o</sub> =-mW



## Curve Characteristics



## Package Dimensions



# Laser Diode Data Sheet



QM-Form: F-025

Date Form: 12.02.10

Version: 05

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## Actual Data Sheet for Laser Diode with Serial Number 082409\_34

(Condition: 150.0mW @ -°C)

Item	Symbol	Value	Unit
Threshold Current	$I_{th}$	38.495	mA
Operating Current	$I_{OP}$	183.27	mA
Operating Voltage	$V_{OP}$	1.89	V
Slope Efficiency	$\eta_s$	1.062	W/A
Light Output Power	$P_o$	150.0	mW
Center Wavelength	$\lambda_p$	794.37	nm