Product Features

Supports 5.6mm and 9mm TO-Cans with long lead lengths

10°C to 85°C temperature control range

Compatible with both ANSI and metric optical table post mounts

Unobstructed access to the front of the TO-Can laser diode

Nitrogen purge

The LDM-4405 Laser Diode Mounting Fixture provides a compact, easy to use solution for mounting and temperature controlling TO-Can packaged laser diodes. The fixture accommodates 5.6mm and 9mm TO-Can laser diodes with 3 or 4 pins. A wide temperature control range is accomplished by an integrated thermoelectric module which provides for an active control range of +10°C to 85°C with heat loads up to 500mW. A nitrogen purge system is incorporated to keep the laser free from condensation when operated in a humid environment.

The LDM-4405 is compatible with ILX Lightwave current sources, temperature controllers, and laser diode controllers through interconnect cabling allowing for quick setup. The fixture is compatible with both ANSI and metric optical table post mounts. The compact profile of the LDM-4405 provides for convenient mounting on an optics table and the unobstructed access to the laser window allows space for aligning collimating optics.



An Easy to Use, Low Cost, TO-Can Mounting Fixture for Laser Diodes



LDM 4405

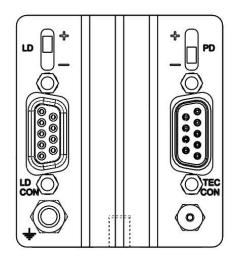
Low Cost TO-Can Laser Diode Mount

Low Cost TO-Can Laser Diode Mount

Affordable, Convenient Control of **TO-Can Laser Diodes**

When the LDM-4405 is paired with ILX's LDX-3412 Current Source and the LDT-5412 Temperature Controller, it provides an affordable test setup for precision current and temperature control of TO-Can laser diodes. The LDM-4405 cover plate provides convenient clamping of TO-Can laser diodes to the cold plate by integrated o-ring and captive screws.

Standard interconnect cables allow for quickly setting up the LDM-4405 with any ILX Lightwave current source or temperature controller. All connections including electrical and nitrogen purge are conveniently located on the back of the LDM-4405. Two switches allow the user to quickly configure the LDM-4405 for most TO-Can pin outs.



Rear Panel View

Specifications

Laser Packages: 5.6mm and 9mm TO-Can, Type 1

Lead Length: 5-20mm

Maximum Laser Current: 500 mA

Input Connectors

Current Source: 9-pin D-sub, female Temperature Controller: 9-pin D-sub, male Nitrogen Purge: Brass barbed fitting for 1/16"

ID tubing

Banana jack, female Ground:

Temperature Control Sensor Type:

Range: 10°C to 85°C Calibrated 10kΩ thermistor

TE Module Ratings

Imax: 3.9A Vmax 3.7V

GENERAL

Size (H x W x D): 2.3" x 2.0" x 1.6"

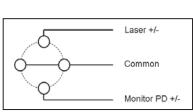
57.2mm x 50.8mm x 40.6mm

Weight: 0.30 lb (136g)

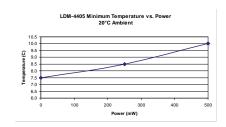
Regulatory Compliance: RoHS

NOTES

Minimum achievable temperature depends on laser thermal power. For more information, refer to ILX Technical Note "Minimum Temperature Range of the LDM-4405".



Socket Connection Type I



Minimum Temperature vs. Power

ORDERING INFORMATION

LDM-4405 Low Cost TO-Can Laser Diode Mounting Fixture*

(MK-650 base not included)

MK-650 **Head Mounting Post**

CC-305S Current Source / Laser Diode Mount

Interconnect Cable

CC-505S TE Controller / Laser Diode Mount

Interconnect Cable

LDX-3412 Low Cost Precision Current Source LDT-5412 Thermoelectric Temperature Controller

In keeping with our commitment to continuing improvement, ILX Lightwave reserves the right to change specifications without notice or liability for such changes.



www.ilxlightwave.com

