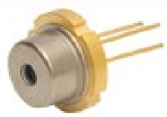
LASER DIODES: Ø3.8 mm, TO-46, Ø5.6 mm, Ø9 mm, AND Ø9.5 mm TO CANS

- ▶ **Ø3.8 mm, TO-46, Ø5.6 mm, Ø9 mm, and Ø9.5 mm Laser Diodes**
- ▶ **Center Wavelengths Ranging from 375 nm to 4.60 µm**
- ▶ **Output Powers from 0.2 mW to 2 W**

Ø3.8 mm



Ø9 mm

Ø9 mm
(High Heat Load)

Ø9.5 mm
(DPSS Laser)

Ø5.6 mm

TO-46
(VCSEL Diode)

Application Idea
Our Laser Diode Driver Kits Include an LD Controller, TEC Controller, LD/TEC Mount, and Accessories

OVERVIEW

Features

- Fabry-Perot (FP), Distributed Feedback (DFB), Volume Holographic Grating (VHG), Diode-Pumped Solid-State (DPSS), Quantum Cascade (QCL), Interband Cascade (ICL), and Vertical-Cavity Surface-Emitting Laser (VCSEL) Diodes
- Output Powers from 0.2 mW to 2 W
- Center Wavelengths Available from 375 nm to 9.5 µm
- Easily Choose a Compatible Mount Using Our LD Pin Codes
- Compatible with Thorlabs' Laser Diode and TEC Controllers

TO-packaged laser diodes are available in standard Ø3.8 mm, Ø5.6 mm, or Ø9 mm TO cans, as well as TO-46 or Ø9.5 mm cans. We have categorized the pin configurations into standard A, B, C, D, E, F, G, and H pin codes (see the diagram below). This pin code allows the user to easily determine compatible mounts.

Some of our diodes that are offered in header packages can be converted to a sealed TO can package by request, as indicated in the tables below. Please contact Tech Support for details.

Notes on Center Wavelength
While the center wavelength is listed for each diode, this is only a typical number. The center wavelength of a particular diode varies from production run to production run. Thus, the diode you receive may not operate at the typical center wavelength. Diodes can be temperature tuned, which will alter the lasing wavelength. A number of items below are listed as Wavelength Tested, which means that the dominant

Laser Diode Selection Guide[a]
Shop by Package / Type
TO Can (Ø3.8, TO-46, Ø5.6, Ø9, and Ø9.5 mm)
TO Can Pigtail, Collimator Output (SM)
TO Can Pigtail (SM)
TO Can Pigtail (PM)
TO Can Pigtail (MM)
Fabry-Perot Butterfly Package
FBG-Stabilized Butterfly Package
VHG-Stabilized Butterfly Package (MM)
MIR Fabry-Perot QCL and ICL, TO Can
MIR Fabry-Perot QCL, Two-Tab C-Mount
MIR Fabry-Perot QCL, D-Mount
MIR Fabry-Perot QCL, High Heat Load
Chip on Submount
Single-Frequency Lasers
DFB TO Can Pigtail
DFB Butterfly Package
VHG-Stabilized TO Can
VHG-Stabilized TO Can Pigtail (SM)
VHG-Stabilized Butterfly Package

Click to Enlarge
Ø9 mm TO-Can Laser Diode Secured in Post-Mounted LM9F Holder

wavelength of each unit has been measured and recorded. For many of these items, after clicking "Choose Item" below, a list will appear that contains the dominant wavelength, output power, and operating current of each in-stock unit. Clicking on the red Docs Icon next to the serial number provides access to a PDF with serial-number-specific L-I-V and spectral characteristics. For products listed as Wavelength Tested that do not have the "Choose Item" option, please contact Tech Support with inquires about specific wavelengths.

Laser Mode and Linewidth

We offer laser diodes with different output characteristics (power, wavelength, beam size, shape, etc.). Most lasers offered here are single transverse mode (single mode, or SM) and a few are designed for higher-power, multiple-transverse-mode (multimode, or MM) operation. Our wavelength stabilized VHG laser diodes, sold below, have excellent single mode performance. Some single mode laser diodes can be operated with limited single-longitudinal-mode characteristics (see tables below for additional information). For better side mode suppression ratio (SMSR) performance, consider devices such as DFB lasers, VHG-stabilized lasers, DBR lasers, or external cavity lasers. Thorlabs single-frequency lasers are highlighted in green in the tables below; in particular, our VHG-stabilized, DFB, DBR, and external cavity lasers have very narrow linewidths (≤20 MHz for the VHG-stabilized and DFB lasers and <100 kHz for the DBR and ECL lasers). Please see our Laser Diode Tutorial for more information on these topics and laser diodes in general.

Laser diodes are sensitive to electrostatic shock. Please take the proper precautions when handling the device (see our electrostatic shock accessories). Laser diodes are also sensitive to optical feedback, which can cause significant fluctuations in the output power of the laser diode depending on the application. See our optical isolators for potential solutions to this problem. Tech Support staff are available to help you select a laser diode and to discuss possible operation issues.

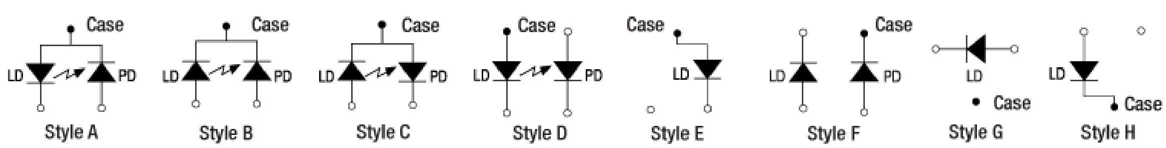
ECL Butterfly Package
DBR Butterfly Package
ULN Hybrid Extended Butterfly Package
MIR DFB QCL, Two-Tab C-Mount
MIR DFB QCL, D-Mount
MIR DFB QCL and ICL, High Heat Load

Shop By Wavelength

a. Our complete selection of laser diodes is available on the *LD Selection Guide* tab above.

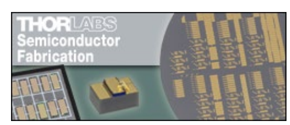
Webpage Features	
(info icon)	Clicking this icon opens a window that contains specifications and mechanical drawings.
(docs icon)	Clicking this icon allows you to download our standard support documentation.
Choose Item	Clicking the words "Choose Item" opens a drop-down list containing all of the in-stock lasers around the desired center wavelength. The red icon next to the serial number then allows you to download L-I-V and spectral measurements for that serial-numbered device.

Pin Codes



Laser Diode pin codes indicate which mounts and diodes are compatible. The drawings do not represent exact wiring diagrams.

Pin Code	Monitor Photodiode	Pin Code	Monitor Photodiode
A	Yes	E	No
B	Yes	F	Yes
C	Yes	G	No
D	Yes	H	No



For warranty information for laser diodes, please refer to the *LD Operation* tab.

COLLIMATION TUTORIAL

Choosing a Collimation Lens for Your Laser Diode

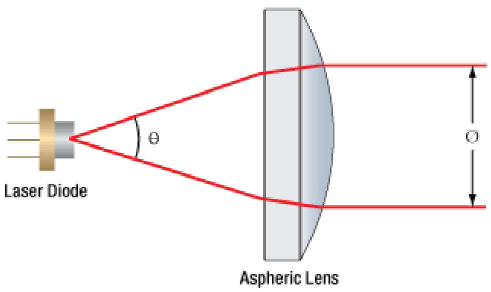
Since the output of a laser diode is highly divergent, collimating optics are necessary. Aspheric lenses do not introduce spherical aberration and are therefore are commonly chosen when the collimated laser beam is to be between one and five millimeters. A simple example will illustrate the key specifications to consider when choosing the correct lens for a given application. The second example below is an extension of the procedure, which will show how to circularize an elliptical beam.

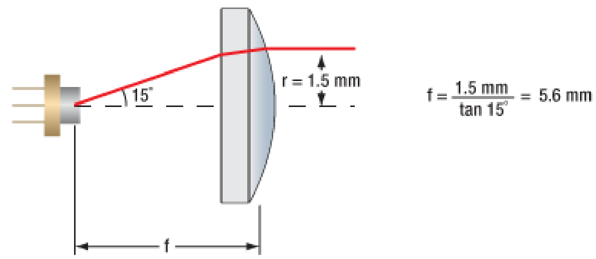
Example 1: Collimating a Diverging Beam

- Laser Diode to be Used: L780P010
- Desired Collimated Beam Diameter: Ø3 mm (Major Axis)

When choosing a collimation lens, it is essential to know the divergence angle of the source being used and the desired output diameter. The specifications for the L780P010 laser diode indicate that the typical parallel and perpendicular FWHM beam divergences are 8° and 30°, respectively. Therefore, as the light diverges, an elliptical beam will result. To collect as much light as possible during the collimation process, consider the larger of these two divergence angles in any calculations (i.e., in this case, use 30°). If you wish to convert your elliptical beam into a round one, we suggest using an anamorphic prism pair, which magnifies one axis of your beam; for details, see Example 2 below.

Assuming that the thickness of the lens is small compared to the radius of curvature, the thin lens approximation can be used to determine the appropriate focal length for the asphere. Assuming a divergence angle of 30° (FWHM) and desired beam diameter of 3 mm:





Θ = Divergence Angle Ø = Beam Diameter f = Focal Length r = Collimated Beam Radius = Ø/2

Note that the focal length is generally not equal to the needed distance between the light source and the lens.

With this information known, it is now time to choose the appropriate collimating lens. Thorlabs offers a large selection of aspheric lenses. For this application, the ideal lens is a molded glass aspheric lens with focal length near 5.6 mm and our -B antireflection coating, which covers 780 nm. The C171TMD-B (mounted) or 354171-B (unmounted) aspheric lenses have a focal length of 6.20 mm, which will result in a collimated beam diameter (major axis) of 3.3 mm. Next, check to see if the numerical aperture (NA) of the diode is smaller than the NA of the lens:

$$0.30 = NA_{Lens} > NA_{Diode} \approx \sin(15°) = 0.26$$

Up to this point, we have been using the full-width at half maximum (FWHM) beam diameter to characterize the beam. However, a better practice is to use the $1/e^2$ beam diameter. For a Gaussian beam profile, the $1/e^2$ diameter is almost equal to 1.7X the FWHM diameter. The $1/e^2$ beam diameter therefore captures more of the laser diode's output light (for greater power delivery) and minimizes far-field diffraction (by clipping less of the incident light).

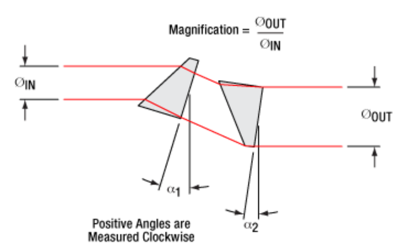
A good rule of thumb is to pick a lens with an NA twice that of the laser diode NA. For example, either the A390-B or the A390TM-B could be used as these lenses each have an NA of 0.53, which is more than twice the approximate NA of our laser diode (0.26). These lenses each have a focal length of 4.6 mm, resulting in an approximate major beam diameter of 2.5 mm. In general, using a collimating lens with a short focal length will result in a small collimated beam diameter and a large beam divergence, while a lens with a large focal length will result in a large collimated beam diameter and a small divergence.

Example 2: Circularizing an Elliptical Beam

Using the laser diode and aspheric lens chosen above, we can use an anamorphic prism pair to convert our collimated, elliptical beam into a circular beam.

Whereas earlier we considered only the larger divergence angle, we now look at the smaller beam divergence of 8°. From this, and using the effective focal length of the A390-B aspheric lens chosen in Example 1, we can determine the length of the semi-minor axis of the elliptical beam after collimation:

$$r' = f * \tan(\Theta'/2) = 4.6 \text{ mm} * \tan(4°) = 0.32 \text{ mm}$$



The minor beam diameter is double the semi-minor axis, or 0.64 mm. In order to magnify the minor diameter to be equal to the major diameter of 2.5 mm, we will need an anamorphic prism pair that yields a magnification of 3.9. Thorlabs offers both mounted and unmounted prism pairs. Mounted prism pairs provide the benefit of a stable housing to preserve alignment, while unmounted prism pairs can be positioned at any angle to achieve the exact desired magnification.

The PS883-B mounted prism pair provides a magnification of 4.0 for a 950 nm wavelength beam. Because shorter wavelengths undergo greater magnification when passing through the prism pair, we can expect our 780 nm beam to be magnified by slightly more than 4.0X. Thus, the beam will still maintain a small degree of ellipticity.

Alternatively, we can use the PS871-B unmounted prism pair to achieve the precise magnification of the minor diameter necessary to produce a circular beam. Using the data available here, we see that the PS871-B achieves a magnification of 4.0 when the prisms are positioned at the following angles for a 670 nm wavelength beam:

α_1: +34.608°　　　　α_2: -1.2455°

Refer to the diagram to the right for α_1 and α_2 definitions. Our 780 nm laser will experience slightly less magnification than a 670 nm beam passing through the prisms at these angles. Some trial and error may be required to achieve the exact desired magnification. In general:

- To increase magnification, rotate the first prism clockwise (increasing α_1) and rotate the second prism counterclockwise (decreasing α_2).
- To reduce magnification, rotate the first prism counterclockwise (decreasing α_1) and rotate the second prism clockwise (increasing α_2).

Remember that the prism pair introduces a linear offset between the input and output beams which increases with greater magnification.

LD OPERATION

Video Insight: Setting Up a TO Can Laser Diode

Installing a TO can laser diode in a mount and setting it up to run under temperature and current control presents many opportunities to make a mistake that could damage or destroy the laser. This step-by-step guide includes tips for keeping humans and laser diodes safe from harm.

When operated within their specifications, laser diodes have extremely long lifetimes. Most failures occur from mishandling or operating the lasers beyond their maximum ratings. Laser diodes are among the most static-sensitive devices currently made and proper ESD protection should be worn whenever handling a laser diode. Due to their extreme electrostatic sensitivity, laser diodes cannot be returned after their sealed package has been opened. Laser diodes in their original sealed package can be returned for a full refund or credit.

Handling and Storage Precautions

Because of their extreme susceptibility to damage from electrostatic discharge (ESD), care should be taken whenever handling and operating laser diodes.

Wrist Straps
Use grounded anti-static wrist straps whenever handling diodes.

Anti-Static Mats
Always work on grounded anti-static mats.

Laser Diode Storage
When not in use, short the leads of the laser together to protect against ESD damage.

Operating and Safety Precautions

Use an Appropriate Driver
Laser diodes require precise control of operating current and voltage to avoid overdriving the laser. In addition, the laser driver should provide protection against power supply transients. Select a laser driver appropriate for your application. **Do not use a voltage supply with a current-limiting resistor** since it does not provide sufficient regulation to protect the laser diode.

Power Meters
When setting up and calibrating a laser diode with its driver, use a NIST-traceable power meter to precisely measure the laser output. It is usually safest to measure the laser diode output directly before placing the laser in an optical system. If this is not possible, be sure to take all optical losses (transmissive, aperture stopping, etc.) into consideration when determining the total output of the laser.

Reflections

Flat surfaces in the optical system in front of a laser diode can cause some of the laser energy to reflect back onto the laser's monitor photodiode, giving an erroneously high photodiode current. If optical components are moved within the system and energy is no longer reflected onto the monitor photodiode, a constant-power feedback loop will sense the drop in photodiode current and try to compensate by increasing the laser drive current and possibly overdriving the laser. Back reflections can also cause other malfunctions or damage to laser diodes. To avoid this, be sure that all surfaces are angled 5-10°, and when necessary, use optical isolators to attenuate direct feedback into the laser.

Heat Sinks
Laser diode lifetime is inversely proportional to operating temperature. Always mount the laser diode in a suitable heat sink to remove excess heat from the laser package.

Voltage and Current Overdrive
Be careful not to exceed the maximum voltage and drive current listed on the specification sheet with each laser diode, even momentarily. Also, reverse voltages as little as 3 V can damage a laser diode.

ESD-Sensitive Device
Laser diodes are susceptible to ESD damage even during operation. This is particularly aggravated by using long interface cables between the laser diode and its driver due to the inductance that the cable presents. Avoid exposing the laser diode or its mounting apparatus to ESD at all times.

ON/OFF and Power-Supply-Coupled Transients
Due to their fast response times, laser diodes can be easily damaged by transients less than 1 µs. High-current devices such as soldering irons, vacuum pumps, and fluorescent lamps can cause large momentary transients, and thus surge-protected outlets should always be used when working with laser diodes.

If you have any questions regarding laser diodes, please contact Thorlabs Technical Support for assistance.

LASER SAFETY

Laser Safety and Classification

Safe practices and proper usage of safety equipment should be taken into consideration when operating lasers. The eye is susceptible to injury, even from very low levels of laser light. Thorlabs offers a range of laser safety accessories that can be used to reduce the risk of accidents or injuries. Laser emission in the visible and near infrared spectral ranges has the greatest potential for retinal injury, as the cornea and lens are transparent to those wavelengths, and the lens can focus the laser energy onto the retina.

Safe Practices and Light Safety Accessories

- Laser safety eyewear must be worn whenever working with Class 3 or 4 lasers.
- Regardless of laser class, Thorlabs recommends the use of laser safety eyewear whenever working with laser beams with non-negligible powers, since metallic tools such as screwdrivers can accidentally redirect a beam.
- Laser goggles designed for specific wavelengths should be clearly available near laser setups to protect the wearer from unintentional laser reflections.
- Goggles are marked with the wavelength range over which protection is afforded and the minimum optical density within that range.
- Laser Safety Curtains and Laser Safety Fabric shield other parts of the lab from high energy lasers.
- Blackout Materials can prevent direct or reflected light from leaving the experimental setup area.
- Thorlabs' Enclosure Systems can be used to contain optical setups to isolate or minimize laser hazards.
- A fiber-pigtailed laser should always be turned off before connecting it to or disconnecting it from another fiber, especially when the laser is at power levels above 10 mW.







- All beams should be terminated at the edge of the table, and laboratory doors should be closed whenever a laser is in use.
- Do not place laser beams at eye level.
- Carry out experiments on an optical table such that all laser beams travel horizontally.
- Remove unnecessary reflective items such as reflective jewelry (e.g., rings, watches, etc.) while working near the beam path.
- Be aware that lenses and other optical devices may reflect a portion of the incident beam from the front or rear surface.
- Operate a laser at the minimum power necessary for any operation.
- If possible, reduce the output power of a laser during alignment procedures.
- Use beam shutters and filters to reduce the beam power.
- Post appropriate warning signs or labels near laser setups or rooms.
- Use a laser sign with a lightbox if operating Class 3R or 4 lasers (i.e., lasers requiring the use of a safety interlock).
- Do not use Laser Viewing Cards in place of a proper Beam Trap.

Laser Classification

Lasers are categorized into different classes according to their ability to cause eye and other damage. The International Electrotechnical Commission (IEC) is a global organization that prepares and publishes international standards for all electrical, electronic, and related technologies. The IEC document 60825-1 outlines the safety of laser products. A description of each class of laser is given below:

Class	Description	Warning Label
1	This class of laser is safe under all conditions of normal use, including use with optical instruments for intrabeam viewing. Lasers in this class do not emit radiation at levels that may cause injury during normal operation, and therefore the maximum permissible exposure (MPE) cannot be exceeded. Class 1 lasers can also include enclosed, high-power lasers where exposure to the radiation is not possible without opening or shutting down the laser.	
1M	Class 1M lasers are safe except when used in conjunction with optical components such as telescopes and microscopes. Lasers belonging to this class emit large-diameter or divergent beams, and the MPE cannot normally be exceeded unless focusing or imaging optics are used to narrow the beam. However, if the beam is refocused, the hazard may be increased and the class may be changed accordingly.	
2	Class 2 lasers, which are limited to 1 mW of visible continuous-wave radiation, are safe because the blink reflex will limit the exposure in the eye to 0.25 seconds. This category only applies to visible radiation (400 - 700 nm).	
2M	Because of the blink reflex, this class of laser is classified as safe as long as the beam is not viewed through optical instruments. This laser class also applies to larger-diameter or diverging laser beams.	
3R	Class 3R lasers produce visible and invisible light that is hazardous under direct and specular-reflection viewing conditions. Eye injuries may occur if you directly view the beam, especially when using optical instruments. Lasers in this class are considered safe as long as they are handled with restricted beam viewing. The MPE can be exceeded with this class of laser; however, this presents a low risk level to injury. Visible, continuous-wave lasers in this class are limited to 5 mW of output power.	
3B	Class 3B lasers are hazardous to the eye if exposed directly. Diffuse reflections are usually not harmful, but may be when using higher-power Class 3B lasers. Safe handling of devices in this class includes wearing protective eyewear where direct viewing of the laser beam may occur. Lasers of this class must be equipped with a key switch and a safety interlock; moreover, laser safety signs should be used, such that the laser cannot be used without the safety light turning on. Laser products with power output near the upper range of Class 3B may also cause skin burns.	
4	This class of laser may cause damage to the skin, and also to the eye, even from the viewing of diffuse reflections. These hazards may also apply to indirect or non-specular reflections of the beam, even from apparently matte surfaces. Great care must be taken when handling these lasers. They also represent a fire risk, because they may ignite combustible material. Class 4 lasers must be equipped with a key switch and a safety interlock.	
All class 2 lasers (and higher) must display, in addition to the corresponding sign above, this triangular warning sign.		

375 - 405 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a,b]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[c]	Compatible Socket	Wavelength Tested	Laser Mode
L375P70MLD[d]		375 nm	70 mW	110 mA / 140 mA	Ø5.6 mm	F	Yes	-	No	Single Transverse Mode

L404P400M		404 nm	400 mW	370 mA / 410 mA	Ø5.6 mm	G	No	S7060R	No	Multimode
L405P20		405 nm	20 mW	38 mA / 55 mA	Ø5.6 mm	B	Yes	S7060R	No	Single Transverse Mode
L405G2[e]		405 nm	35 mW	50 mA / 75 mA	Ø3.8 mm	G	No	S038S	Yes	Single Transverse Mode
DL5146-101S		405 nm	40 mW	70 mA / 100 mA	Ø5.6 mm	B	Yes	S7060R	No	Single Transverse Mode
L405A1		405 nm	175 mW (Min)	150 mA / 200 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L405G1		405 nm	1000 mW	900 mA / 1200 mA	Ø9 mm	G	No	S8060	No	Multimode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Typical value unless otherwise noted.
c. Laser diodes with a built-in monitor photodiode can operate at constant power.
d. A temperature-controlled mount such as our LDM56F(/M) is recommended for general use.
e. The L405G2 is tested to ensure a center wavelength tolerance of ±1 nm.

Part Number	Description	Price	Availability
L375P70MLD	**375 nm, 70 mW, Ø5.6 mm, F Pin Code, Laser Diode**	**$5,223.29**	**Today**
L404P400M	**404 nm, 400 mW, Ø5.6 mm, G Pin Code, MM Laser Diode**	**$753.14** **Volume Pricing Available**	**Today**
L405P20	**405 nm, 20 mW, Ø5.6 mm, B Pin Code, Laser Diode**	**$58.21** **Volume Pricing Available**	**Today**
L405G2	**405 nm, 35 mW, Ø3.8 mm, G Pin Code, Laser Diode**	**$104.93** **Volume Pricing Available**	**Today**
DL5146-101S	**405 nm, 40 mW, Ø5.6 mm, B Pin Code Laser Diode**	**$95.93** **Volume Pricing Available**	**Today**
L405A1	**405 nm, 175 mW, Ø5.6 mm, A Pin Code, Laser Diode**	**$805.23**	**Today**
L405G1	**405 nm, 1000 mW, Ø9 mm, G Pin Code, MM Laser Diode**	**$780.30**	**Today**

450 - 520 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a,b]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[c]	Compatible Socket	Wavelength Tested	Laser Mode
L450G3		450 nm	100 mW (Min)	80 mA / 110 mA	Ø3.8 mm	G	No	S038S	No	Single Transverse Mode
L450G2		450 nm	100 mW (Min)	80 mA / 110 mA	Ø5.6 mm	G	No	S7060R	No	Single Transverse Mode
L450P1600MM		450 nm	1600 mW	1200 mA / 1500 mA	Ø5.6 mm	G	No	S7060R	No	Multimode
L473P100		473 nm	100 mW	120 mA / 150 mA	Ø5.6 mm	F+[d]	Yes	-	No	Single Transverse Mode
L488P60		488 nm	60 mW	75 mA / 110 mA	Ø5.6 mm	B	Yes	S7060R	No	Single Transverse Mode
L515A1		515 nm	10 mW	50 mA / 100 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L520A1		520 nm	30 mW (Min)	80 mA / 100 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
PL520		520 nm	50 mW	150 mA / 160 mA	Ø3.8 mm	G	No	S038S	No	Single Transverse Mode
L520P50		520 nm	50 mW	150 mA / 160 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L520A2		520 nm	110 mW (Min)	225 mA / 330 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Typical value unless otherwise noted.
c. Laser diodes with a built-in monitor photodiode can operate at constant power.
d. This laser diode has a built in Zener diode to help protect against damage from small levels of electrostatic discharge and reverse potential on the laser diode. A temperature-controlled mount such as our LDM56F(/M) or LDM90(/M) is recommended for general use.

Part Number	Description	Price	Availability
L450G3	450 nm, 100 mW, Ø3.8 mm, G Pin Code, Laser Diode	$138.57	Today
L450G2	450 nm, 100 mW, Ø5.6 mm, G Pin Code, Laser Diode	$126.90	Today
L450P1600MM	450 nm, 1600 mW, Ø5.6 mm, G Pin Code, MM, Laser Diode	$94.74	Today
L473P100	473 nm, 100 mW, Ø5.6 mm, F+ Pin Code, Laser Diode	$3,032.68	Today
L488P60	488 nm, 60 mW, Ø5.6 mm, B Pin Code, Laser Diode	$2,793.99	Today
L515A1	515 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$30.68 Volume Pricing Available	Today
L520A1	520 nm, 30 mW, Ø5.6 mm, A Pin Code, Laser Diode	$76.29	Today
PL520	520 nm, 50 mW, Ø3.8 mm, G Pin Code Laser Diode	$89.69 Volume Pricing Available	Today
L520P50	520 nm, 50 mW, Ø5.6 mm, A Pin Code, Laser Diode	$76.61 Volume Pricing Available	Today
L520A2	520 nm, 110 mW, Ø5.6 mm, A Pin Code, Laser Diode	$155.40	Today

532 nm TO Can DPSS Lasers

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode	Compatible Socket	Wavelength Tested	Laser Mode
DJ532-10[b]		532 nm	10 mW	220 mA / 250 mA	Ø9.5 mm (Non-Standard)[c]	A	Yes[d]	-	No	Single Transverse Mode
DJ532-40[b]		532 nm	40 mW	330 mA / 400 mA	Ø9.5 mm (Non-Standard)[c]	E	No	-	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Click here for more information on our 532 nm Diode Pumped Solid State Lasers.
c. These lasers have the same pin spacing as our Ø5.6 mm laser diodes. They are compatible with the LDM56 Laser Diode Mount using the LDM56DJ DPSS Laser Mounting Flange.
d. The monitor photodiode of the DJ532-10 measures the power of the pump source, not the 532 nm output. Therefore, we recommend operating these diodes in constant current mode.

Part Number	Description	Price	Availability
DJ532-10	532 nm, 10 mW, A Pin Code, DPSS Laser	$175.81	Today
DJ532-40	532 nm, 40 mW, E Pin Code, DPSS Laser	$212.64	Today

633 - 635 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
HL63163DG		633 nm	100 mW	170 mA / 230 mA	Ø5.6 mm	G	No	S7060R	No	Single Transverse Mode
L635P5		635 nm	5 mW	30 mA / 45 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6312G		635 nm	5 mW	50 mA / 85 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode

HL6320G		635 nm	10 mW	60 mA / 95 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
HL6322G		635 nm	15 mW	75 mA / 100 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.

Part Number	Description	Price	Availability
HL63163DG	**633 nm, 100 mW, Ø5.6 mm, G Pin Code, Laser Diode**	**$337.37** **Volume Pricing Available**	**Today**
L635P5	**635 nm, 5 mW, Ø5.6 mm, A Pin Code, Laser Diode**	**$27.67** **Volume Pricing Available**	**Today**
HL6312G	**635 nm, 5 mW, Ø9 mm, A Pin Code, Laser Diode**	**$24.94** **Volume Pricing Available**	**Today**
HL6320G	**635 nm, 10 mW, Ø9 mm, A Pin Code, Laser Diode**	**$47.24** **Volume Pricing Available**	**Today**
HL6322G	**635 nm, 15 mW, Ø9 mm, A Pin Code, Laser Diode**	**$79.00** **Volume Pricing Available**	**Today**

637 - 639 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L637P5		637 nm	5 mW	20 mA / 25 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
HL63142DG		637 nm	100 mW	140 mA / 180 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL63133DG		637 nm	170 mW	250 mA / 320 mA	Ø5.6 mm	G	No	S7060R	No	Single Transverse Mode
HL6388MG		637 nm	250 mW	340 mA / 430 mA	Ø5.6 mm	H	No	S7060R	No	Multimode
L637G1		637 nm	1200 mW	1100 mA / 1500 mA	Ø9 mm[c]	G	No	Custom[c]	No	Multimode
L638P040		638 nm	40 mW	92 mA / 115 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L638P150		638 nm	150 mW	230 mA / 300 mA	Ø3.8 mm	G	No	S038S	No	Single Transverse Mode
L638P200		638 nm	200 mW	280 mA / 330 mA	Ø5.6 mm	G	No	S7060R	No	Single Transverse Mode
L638P700M		638 nm	700 mW	820 mA / 1000 mA	Ø5.6 mm	G	No	S7060R	No	Multimode
HL6358MG		639 nm	10 mW	40 mA / 50 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6323MG		639 nm	30 mW	100 mA / 130 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. A socket is included to assist with soldering. The leads on this diode have a larger 0.6 mm diameter than the typical 0.45 mm diameter for a Ø9 mm package. This makes it incompatible with mounts and sockets that are designed to fit a standard Ø9 mm TO can package, such as our LDM90 mount.

Part Number	Description	Price	Availability
L637P5	**Customer Inspired! 637 nm, 5 mW, Ø5.6 mm, C Pin Code, Laser Diode**	**$15.68** **Volume Pricing Available**	**Today**
HL63142DG	**637 nm, 100 mW, Ø5.6 mm, A Pin Code, Laser Diode**	**$321.92** **Volume Pricing Available**	**Today**
HL63133DG	**637 nm, 170 mW, Ø5.6 mm, G Pin Code, Laser Diode**	**$190.07** **Volume Pricing Available**	**Today**
HL6388MG	**637 nm, 250 mW, Ø5.6 mm, H Pin Code, MM, Laser Diode**	**$65.93** **Volume Pricing Available**	**Today**
L637G1	**637 nm, 1200 mW, Ø9 mm, G Pin Code, MM, Laser Diode**	**$178.09** **Volume Pricing Available**	**Today**

L638P040	638 nm, 40 mW, Ø5.6 mm, A Pin Code, Laser Diode	$112.85 Volume Pricing Available	Today
L638P150	638 nm, 150 mW, Ø3.8 mm, G Pin Code, Laser Diode	$54.74	Today
L638P200	638 nm, 200 mW, Ø5.6 mm, G Pin Code, Laser Diode	$153.73	Today
L638P700M	638 nm, 700 mW, Ø5.6 mm, G Pin Code, MM, Laser Diode	$72.17 Volume Pricing Available	Today
HL6358MG	639 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$17.94 Volume Pricing Available	Today
HL6323MG	639 nm, 30 mW, Ø5.6 mm, A Pin Code, Laser Diode	$150.87 Volume Pricing Available	Today

640 nm - 660 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
HL6362MG		640 nm	40 mW	90 mA / 110 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6364DG		642 nm	60 mW	120 mA / 155 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6366DG		642 nm	80 mW	150 mA / 175 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6385DG		642 nm	150 mW	250 mA / 350 mA	Ø5.6 mm	H	No	S7060R	No	Single Transverse Mode
L650P007		650 nm	7 mW	28 mA / 35 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6501MG		658 nm	30 mW	75 mA / 120 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
L658P040		658 nm	40 mW	75 mA / 110 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6544FM		660 nm	50 mW	115 mA / 135 mA	Ø5.6 mm	G	No	S7060R	No	Single Transverse Mode
HL6545MG		660 nm	120 mW	170 mA / 210 mA	Ø5.6 mm	H	No	S7060R	No	Single Transverse Mode
L660P120		660 nm	120 mW	175 mA / 210 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.

Part Number	Description	Price	Availability
HL6362MG	640 nm, 40 mW, Ø5.6 mm, A Pin Code, Laser Diode	$136.61 Volume Pricing Available	Today
HL6364DG	642 nm, 60 mW, Ø5.6 mm, A Pin Code, Laser Diode	$180.56 Volume Pricing Available	Today
HL6366DG	642 nm, 80 mW, Ø5.6 mm, A Pin Code, Laser Diode	$229.27 Volume Pricing Available	Today
HL6385DG	642 nm, 150 mW, Ø5.6 mm, H Pin Code, Laser Diode	$356.39 Volume Pricing Available	Today
L650P007	650 nm, 7 mW, Ø5.6 mm, A Pin Code, Laser Diode	$15.08 Volume Pricing Available	Today
HL6501MG	658 nm, 30 mW, Ø5.6 mm, C Pin Code, Laser Diode	$28.63 Volume Pricing Available	Today
L658P040	658 nm, 40 mW, Ø5.6 mm, A Pin Code, Laser Diode	$31.77 Volume Pricing Available	Today
HL6544FM	660 nm, 50 mW, Ø5.6 mm, G Pin Code, Laser Diode	$38.91 Volume Pricing Available	Today
HL6545MG	660 nm, 120 mW, Ø5.6 mm, H Pin Code, Laser Diode	$51.09 Volume Pricing Available	Today
L660P120	660 nm, 120 mW, Ø5.6 mm, C Pin Code, Laser Diode	$116.73 Volume Pricing Available	Today

670 nm - 730 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L670VH1		670 nm	1 mW	2.5 mA / 2.8 mA	TO-46	H	No	S8060	No	Single Transverse Mode
HL6748MG		670 nm	10 mW	30 mA / 45 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6714G		670 nm	10 mW	55 mA / 90 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
HL6756MG		670 nm	15 mW	35 mA / 45 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
HL6750MG		685 nm	50 mW	70 mA / 120 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
HL6738MG		690 nm	30 mW	85 mA / 115 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
HL7001MG		705 nm	40 mW	75 mA / 100 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
HL7302MG		730 nm	40 mW	75 mA / 100 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.

Part Number	Description	Price	Availability
L670VH1	670 nm, 1 mW, TO-46, H Pin Code, VCSEL Diode	$164.67	Today
HL6748MG	670 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$31.19 Volume Pricing Available	Today
HL6714G	670 nm, 10 mW, Ø9 mm, A Pin Code, Laser Diode	$59.11 Volume Pricing Available	Today
HL6756MG	670 nm, 15 mW, Ø5.6 mm, A Pin Code, Laser Diode	$70.69 Volume Pricing Available	Today
HL6750MG	685 nm, 50 mW, Ø5.6 mm, C Pin Code, Laser Diode	$93.24 Volume Pricing Available	Today
HL6738MG	690 nm, 30 mW, Ø5.6 mm, C Pin Code, Laser Diode	$56.43 Volume Pricing Available	Today
HL7001MG	Customer Inspired! 705 nm, 40 mW, Ø5.6 mm, C Pin Code, Laser Diode	$420.53 Volume Pricing Available	Today
HL7302MG	730 nm, 40 mW, Ø5.6 mm, A Pin Code, Diode	$420.53 Volume Pricing Available	Today

760 nm - 795 nm TO Can Laser Diodes

Note: The rows shaded green below denote single-frequency laser diodes.

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L760VH1		760 nm	0.5 mW	3 mA (Max)	TO-46	H	No	S8060 or S8060-4	No	Single Frequency[c]
L763VH1		763 nm	0.5 mW	3 mA (Max)	TO-46	H	No	S8060 or S8060-4	No	Single Frequency[c]
L780P010		780 nm	10 mW	24 mA / 40 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse

										Mode
L785P5		785 nm	5 mW	28 mA / 40 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L785P25		785 nm	25 mW	45 mA / 60 mA	Ø5.6 mm	B	Yes	S7060R	No	Single Transverse Mode
L785P090		785 nm	90 mW	125 mA / 165 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
LD785-SEV300[d]		785 nm	300 mW	500 mA (Max)[e]	Ø9 mm[f]	E	No	S8060 or S8060-4	Yes	Single Frequency[c]
LD785-SH300[g]		785 nm	300 mW	400 mA / 450 mA	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode
LD785-SE400[g]		785 nm	400 mW	550 mA / 600 mA	Ø9 mm	E	No	S8060 or S8060-4	Yes	Single Transverse Mode
L795VH1		795 nm	0.25 mW	1.2 mA / 1.5 mA	TO-46	H	No	S8060 or S8060-4	No	Single Frequency[c]

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. Single Longitudinal Mode and Single Transverse Mode
d. In order to achieve the specified performance, we recommend using the LDM90(/M) Laser Diode Mount and, when collimated, an NIR Optical Isolator; single frequency performance when collimated is only guaranteed with >35 dB isolation of back reflections. This volume holographic grating (VHG) laser diode is also available in an SM pigtail package with internal isolator.
e. The power can be tuned across the operating current range, given in the serial-number-specific documentation, while maintaining wavelength-stabilized, single-frequency performance within a stabilized temperature range.
f. The Ø9 mm package for the LD785-SEV300 is 4.30 mm (0.17") thick, which is more than the standard Ø9 mm package thickness of 1.50 mm (0.06"). The diode will still be compatible with all Ø9 mm laser diode mounts; please see the *Drawing* tab in the blue info icon ( ) above for full package specifications. Mounting this diode in the LDM90(/M) mount requires two 2-56 screws, included with this diode.
g. This diode is exceptionally sensitive to optical feedback. Any reflection with more than 2% of the incident power has the potential to permanently damage the diode.

Part Number	Description	Price	Availability
L760VH1	**760 nm, 0.5 mW, TO-46, H Pin Code, VCSEL Diode**	**$695.64**	**Today**
L763VH1	**763 nm, 0.5 mW, TO-46, H Pin Code, VCSEL Diode**	**$695.64**	**Today**
L780P010	**780 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode**	**$27.45 Volume Pricing Available**	**Today**
L785P5	**785 nm, 5 mW, Ø5.6 mm, A Pin Code, Laser Diode**	**$12.93 Volume Pricing Available**	**Today**
L785P25	**785 nm, 25 mW, Ø5.6 mm, B Pin Code, Laser Diode**	**$43.36 Volume Pricing Available**	**Today**
L785P090	**785 nm, 90 mW, Ø5.6 mm, C Pin Code, Laser Diode**	**$50.49**	**Today**
LD785-SEV300	**Customer Inspired! 785 nm, 300 mW, Ø9 mm TO Can, E Pin Code, VHG Wavelength-Stabilized Single-Frequency Laser Diode**	**$1,640.53**	**Today**
LD785-SEV300	**Customer Inspired! CWL = 784.6 nm, P = 298.8 mW (I = 400 mA),20 °C**	**$1,640.53**	**7-10 Days**
LD785-SEV300	**Customer Inspired! CWL = 784.4 nm, P = 296.3 mW (I = 400 mA),20 °C**	**$1,640.53**	**Today**
LD785-SEV300	**Customer Inspired! CWL = 784.3 nm, P = 292.8 mW (I = 400 mA),20 °C**	**$1,640.53**	**Today**
LD785-SEV300	**Customer Inspired! CWL = 784.3 nm, P = 302.6 mW (I = 400 mA),20 °C**	**$1,640.53**	**Today**
LD785-	**Customer Inspired! CWL = 784.4 nm, P = 292.3 mW (I = 400 mA),20 °C**	**$1,640.53**	**Today**

SEV300			
LD785-SEV300	Customer Inspired! CWL = 784.3 nm, P = 287.1 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.4 nm, P = 317.7 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.4 nm, P = 304.3 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.5 nm, P = 308.3 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.5 nm, P = 296.3 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.6 nm, P = 324.6 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.5 nm, P = 306.7 mW (I = 400 mA),20 °C	$1,640.53	Today
LD785-SEV300	Customer Inspired! CWL = 784.4 nm, P = 294.3 mW (I = 400 mA),20 °C	$1,640.53	7-10 Days
LD785-SEV300	Customer Inspired! CWL = 784.5 nm, P = 302.2 mW (I = 400 mA),20 °C	$1,640.53	7-10 Days
LD785-SH300	785 nm, 300 mW, Ø9 mm, H Pin Code, Laser Diode	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 789.5 nm, P = 300.0 mW (I = 386 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 787.5 nm, P = 300.0 mW (I = 378 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 787.8 nm, P = 300.0 mW (I = 381 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.4 nm, P = 300.0 mW (I = 378 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 790.0 nm, P = 300.0 mW (I = 382 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 788.9 nm, P = 300.0 mW (I = 394 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 788.7 nm, P = 300.0 mW (I = 380 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 790.6 nm, P = 300.0 mW (I = 376 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.4 nm, P = 300.0 mW (I = 371 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 790.8 nm, P = 300.0 mW (I = 387 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.6 nm, P = 300.0 mW (I = 397 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-	CWL = 789.0 nm, P = 300.0 mW (I = 380 mA), 25 °C	$333.81 Volume Pricing	7-10 Days

SH300		Available	
LD785-SH300	CWL = 792.9 nm, P = 300.0 mW (I = 395 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.5 nm, P = 300.0 mW (I = 378 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 791.6 nm, P = 300.0 mW (I = 390 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.7 nm, P = 300.0 mW (I = 362 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.7 nm, P = 300.0 mW (I = 365 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.6 nm, P = 300.0 mW (I = 397 mA), 25 °C	$333.81 Volume Pricing Available	7-10 Days
LD785-SH300	CWL = 789.7 nm, P = 300.0 mW (I = 367 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 790.3 nm, P = 300.0 mW (I = 367 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 789.9 nm, P = 300.0 mW (I = 367 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 787.9 nm, P = 300.0 mW (I = 372 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 788.4 nm, P = 300.0 mW (I = 375 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 787.8 nm, P = 300.0 mW (I = 362 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 788.5 nm, P = 300.0 mW (I = 372 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 787.8 nm, P = 300.0 mW (I = 369 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 787.9 nm, P = 300.0 mW (I = 376 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 788.5 nm, P = 300.0 mW (I = 370 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 787.9 nm, P = 300.0 mW (I = 384 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SH300	CWL = 788.3 nm, P = 300.0 mW (I = 377 mA), 25 °C	$333.81 Volume Pricing Available	Today
LD785-SE400	785 nm, 400 mW, Ø9 mm, E Pin Code, Laser Diode	$424.09 Volume Pricing	Today

		Available	
LD785-SE400	CWL = 787.5 nm, P = 400.0 mW (I = 545 mA), 25 °C	$424.09 Volume Pricing Available	7-10 Days
LD785-SE400	CWL = 788.1 nm, P = 400.0 mW (I = 520 mA), 25 °C	$424.09 Volume Pricing Available	7-10 Days
LD785-SE400	CWL = 786.5 nm, P = 400.0 mW (I = 520 mA), 25 °C	$424.09 Volume Pricing Available	7-10 Days
LD785-SE400	CWL = 788.0 nm, P = 400.0 mW (I = 534 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 788.8 nm, P = 400.0 mW (I = 555 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 785.3 nm, P = 400.0 mW (I = 527 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 787.6 nm, P = 400.0 mW (I = 567 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 788.4 nm, P = 400.0 mW (I = 520 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 787.4 nm, P = 400.0 mW (I = 509 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 787.1 nm, P = 400.0 mW (I = 518 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 787.7 nm, P = 400.0 mW (I = 532 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 787.1 nm, P = 400.0 mW (I = 571 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 789.0 nm, P = 400.0 mW (I = 510 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 789.9 nm, P = 400.0 mW (I = 528 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 789.9 nm, P = 400.0 mW (I = 527 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 789.9 nm, P = 400.0 mW (I = 535 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD785-SE400	CWL = 790.7 nm, P = 400.0 mW (I = 529 mA), 25 °C	$424.09 Volume Pricing Available	Today
L795VH1	795 nm, 0.25 mW, TO-46, H Pin Code, VCSEL Diode	$164.67	Today

808 nm TO Can Laser Diodes

Note: The rows shaded green below denote single-frequency laser diodes.

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
M9-808-0150		808 nm	150 mW	180 mA / 220 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
L808P200		808 nm	200 mW	260 mA / 300 mA	Ø5.6 mm	A	Yes	S7060R	No	Multimode
L808H1		808 nm	300 mW	400 mA / 450 mA	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode
L808P500MM		808 nm	500 mW	650 mA / 700 mA	Ø5.6 mm	A	Yes	S7060R	No	Multimode
LD808-SE500[c]		808 nm	500 mW	750 mA / 800 mA	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Single Transverse Mode
LD808-SEV500[e]		808 nm	500 mW	800 mA (Max)[f]	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Single Frequency[g]
L808P1000MM		808 nm	1000 mW	1100 mA / 1500 mA	Ø9 mm	E	No	S8060 or S8060-4	No	Multimode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. This diode is exceptionally sensitive to optical feedback. Any reflection with more than 2% of the incident power has the potential to permanently damage the diode.
d. The Ø9 mm package for this diode is 4.30 mm (0.17") thick, which is more than the standard Ø9 mm package thickness of 1.50 mm (0.06"). The diode will still be compatible with all Ø9 mm laser diode mounts; please see the *Drawing* tab in the blue info icon ( ) above for full package specifications. Mounting this diode in the LDM90(/M) mount requires two 2-56 screws, included with this diode.
e. In order to achieve the specified performance, we recommend using the LDM90(/M) Laser Diode Mount and, when collimated, an NIR Optical Isolator; single frequency performance when collimated is only guaranteed with >35 dB isolation of back reflections.
f. The power can be tuned across the operating current range, given in the serial-number-specific documentation, while maintaining wavelength-stabilized, single-frequency performance within a stabilized temperature range.
g. Single Longitudinal Mode and Single Transverse Mode

Part Number	Description	Price	Availability
M9-808-0150	808 nm, 150 mW, Ø9 mm, A Pin Code, Laser Diode	$536.95 Volume Pricing Available	Today
L808P200	808 nm, 200 mW, Ø5.6 mm, A Pin Code, MM, Laser Diode	$76.03 Volume Pricing Available	Today
L808H1	808 nm, 300 mW, Ø9 mm, H Pin Code, Laser Diode	$329.34	Today
L808P500MM	808 nm, 500 mW, Ø5.6 mm, A Pin Code, MM, Laser Diode	$44.85	Today
LD808-SE500	808 nm, 500 mW, Ø9 mm, E Pin Code, Laser Diode	$727.02	Today
LD808-SE500	CWL = 803.2 nm, P = 450.0 mW (I = 625 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 807.8 nm, P = 450.0 mW (I = 590 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 802.8 nm, P = 450.0 mW (I = 612 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 810.0 nm, P = 450.0 mW (I = 600 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 809.0 nm, P = 450.0 mW (I = 596 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 806.2 nm, P = 450.0 mW (I = 607 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 808.2 nm, P = 450.0 mW (I = 597 mA), 25 °C	$727.02	Today
LD808-SE500	CWL = 808.6 nm, P = 450.0 mW (I = 593 mA), 25 °C	$727.02	Today
LD808-SEV500	808 nm, 500 mW, Ø9 mm TO Can, E Pin Code, VHG Wavelength-Stabilized Single-Frequency Laser Diode	$1,761.69 Volume Pricing Available	Today
LD808-SEV500	CWL = 808.2 nm, P = 495.1 mW (I = 750 mA),25 °C	$1,761.69 Volume Pricing Available	Today

LD808-SEV500	CWL = 808.2 nm, P = 500.8 mW (I = 750 mA),25 °C	$1,761.69 Volume Pricing Available	Today
L808P1000MM	808 nm, 1000 mW, Ø9 mm, E Pin Code, MM, Laser Diode	$88.51	Today

820 nm - 895 nm TO Can Laser Diodes

Note: The rows shaded green below denote single-frequency laser diodes.

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L820P100		820 nm	100 mW	145 mA / 210 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
L820P200		820 nm	200 mW	250 mA / 340 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
HL8338MG		830 nm	50 mW	75 mA / 100 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
L830H1		830 nm	250 mW	400 mA (Max)	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode
LD830-SE650[c]		830 nm	650 mW	900 mA / 1050 mA	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Single Transverse Mode
LD830-MA1W		830 nm	1000 mW	2000 mA (Max)	Ø9 mm	A	Yes	S8060 or S8060-4	Yes	Multimode
LD830-ME2W		830 nm	2000 mW	3 A (Max)	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Multimode
L840P200		840 nm	200 mW	255 mA / 340 mA	Ø5.6 mm	C	Yes	S7060R	No	Single Transverse Mode
L850VH1		850 nm	1 mW	6 mA (Max)	TO-46	H	No	S8060	No	Single Frequency[e]
L850P010		850 nm	10 mW	50 mA / 70 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L850P030		850 nm	30 mW	65 mA / 95 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L852P50		852 nm	50 mW	75 mA / 100 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L852P100		852 nm	100 mW	120 mA / 170 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
L852P150		852 nm	150 mW	170 mA / 220 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
L852SEV1[f]		852 nm	270 mW	350 mA / 400 mA[g]	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Single Frequency[e]
L852H1		852 nm	300 mW	415 mA (Max)	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode
LD852-SE600[c]		852 nm	600 mW	950 mA / 1050 mA	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Single Transverse Mode
LD852-SEV600[f]		852 nm	600 mW	1050 mA (Max)[g]	Ø9 mm[d]	E	No	S8060 or S8060-4	Yes	Single Frequency[e]
L880P010		880 nm	10 mW	30 mA / 40 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L895VH1		895 nm	0.2 mW	1.4 mA / 2.0 mA	TO-46	H	No	S8060 or S8060-4	No	Single Frequency[e]

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. This diode is exceptionally sensitive to optical feedback. Any reflection with more than 2% of the incident power has the potential to permanently damage the diode.

d. The Ø9 mm package for this diode is 4.30 mm (0.17") thick, which is more than the standard Ø9 mm package thickness of 1.50 mm (0.06"). The diode will still be compatible with all Ø9 mm laser diode mounts; please see the *Drawing* tab in the blue info icon (i) above for full package specifications. Mounting this diode in the LDM90(/M) mount requires two 2-56 screws, included with this diode.
e. Single Longitudinal Mode and Single Transverse Mode
f. In order to achieve the specified performance, we recommend using the LDM90(/M) Laser Diode Mount and, when collimated, an NIR Optical Isolator; single frequency performance when collimated is only guaranteed with >35 dB isolation of back reflections.
g. The power can be tuned across the operating current range, given in the serial-number-specific documentation, while maintaining wavelength-stabilized, single-frequency performance within a stabilized temperature range.

Part Number	Description	Price	Availability
L820P100	820 nm, 100 mW, Ø5.6 mm, C Pin Code, Laser Diode	$49.90	Today
L820P200	820 nm, 200 mW, Ø5.6 mm, C Pin Code, Laser Diode	$99.50	Today
HL8338MG	830 nm, 50 mW, Ø5.6 mm, C Pin Code, Laser Diode	$65.93 Volume Pricing Available	Today
L830H1	830 nm, 250 mW, Ø9 mm, H Pin Code, Laser Diode	$274.44	Today
LD830-SE650	830 nm, 650 mW, Ø9 mm, E Pin Code, Laser Diode	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.8 nm, P = 650.0 mW (I = 947 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 832.6 nm, P = 650.0 mW (I = 902 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 832.8 nm, P = 650.0 mW (I = 905 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.8 nm, P = 650.0 mW (I = 902 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.0 nm, P = 650.0 mW (I = 895 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.1 nm, P = 650.0 mW (I = 896 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.4 nm, P = 650.0 mW (I = 916 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.1 nm, P = 650.0 mW (I = 923 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 832.5 nm, P = 650.0 mW (I = 915 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-SE650	CWL = 833.1 nm, P = 650.0 mW (I = 960 mA), 25 °C	$424.09 Volume Pricing Available	Today
LD830-MA1W	830 nm, 1 W, Ø9 mm, A Pin Code, MM, Laser Diode	$302.92	Today
LD830-ME2W	830 nm, 2 W, Ø9 mm, E Pin Code, MM, Laser Diode	$605.84	Today
LD830-ME2W	CWL = 832.8 nm, P = 2000.0 mW (I = 2501 mA), 25 °C	$605.84	Today
LD830-ME2W	CWL = 833.6 nm, P = 2000.0 mW (I = 2500 mA), 25 °C	$605.84	Today
LD830-ME2W	CWL = 833.4 nm, P = 2000.0 mW (I = 2465 mA), 25 °C	$605.84	Today

LD830-ME2W	CWL = 833.3 nm, P = 2000.0 mW (I = 2484 mA), 25 °C	$605.84	Today
LD830-ME2W	CWL = 833.0 nm, P = 2000.0 mW (I = 2492 mA), 25 °C	$605.84	Today
LD830-ME2W	CWL = 833.1 nm, P = 2000.0 mW (I = 2486 mA), 25 °C	$605.84	Today
LD830-ME2W	CWL = 833.4 nm, P = 2000.0 mW (I = 2501 mA), 25 °C	$605.84	Today
LD830-ME2W	CWL = 832.8 nm, P = 2000.0 mW (I = 2477 mA), 25 °C	$605.84	Today
L840P200	840 nm, 200 mW, Ø5.6 mm, C Pin Code, Laser Diode	$54.16	Today
L850VH1	850 nm, 1 mW, TO-46, H Pin Code, VCSEL Diode	$164.67	Today
L850P010	850 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$27.45 Volume Pricing Available	Today
L850P030	850 nm, 30 mW, Ø5.6 mm, A Pin Code, Laser Diode	$103.05 Volume Pricing Available	Today
L852P50	852 nm, 50 mW, Ø5.6 mm, A Pin Code, Laser Diode	$172.25 Volume Pricing Available	Today
L852P100	852 nm, 100 mW, Ø9 mm, A Pin Code, Laser Diode	$228.08 Volume Pricing Available	Today
L852P150	852 nm, 150 mW, Ø9 mm, A Pin Code, Laser Diode	$336.19 Volume Pricing Available	Today
L852SEV1	852 nm, 270 mW, Ø9 mm TO Can, E Pin Code, VHG Wavelength-Stabilized Single-Frequency Laser Diode	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 266.3 mW (I = 350 mA),27 °C	$1,000.00	7-10 Days
L852SEV1	CWL = 852.5 nm, P = 247.3 mW (I = 350 mA),25 °C	$1,000.00	Today
L852SEV1	CWL = 852.5 nm, P = 263.7 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 272.0 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.6 nm, P = 248.8 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.6 nm, P = 246.8 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 853.0 nm, P = 267.5 mW (I = 350 mA),32 °C	$1,000.00	Today
L852SEV1	CWL = 852.7 nm, P = 267.9 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 264.5 mW (I = 350 mA),32 °C	$1,000.00	7-10 Days
L852SEV1	CWL = 852.9 nm, P = 264.5 mW (I = 350 mA),32 °C	$1,000.00	Today
L852SEV1	CWL = 852.6 nm, P = 265.9 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.7 nm, P = 262.2 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 260.4 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.7 nm, P = 258.0 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.5 nm, P = 251.6 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 254.5 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 265.5 mW (I = 350 mA),32 °C	$1,000.00	Today
L852SEV1	CWL = 852.7 nm, P = 252.3 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 853.0 nm, P = 255.2 mW (I = 350 mA),32 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 268.2 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.9 nm, P = 277.8 mW (I = 350 mA),33 °C	$1,000.00	Today
L852SEV1	CWL = 852.8 nm, P = 257.7 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 852.7 nm, P = 276.0 mW (I = 350 mA),27 °C	$1,000.00	Today
L852SEV1	CWL = 853.0 nm, P = 278.3 mW (I = 350 mA),33 °C	$1,000.00	Today
L852H1	852 nm, 300 mW, Ø9 mm, H Pin Code, Laser Diode	$384.22	Today
LD852-SE600	852 nm, 600 mW, Ø9 mm, E Pin Code, Laser Diode	$727.02 Volume Pricing Available	Today

LD852-SE600	CWL = 856.6 nm, P = 600.0 mW (I = 930 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 855.9 nm, P = 600.0 mW (I = 942 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 855.9 nm, P = 600.0 mW (I = 921 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 856.4 nm, P = 600.0 mW (I = 940 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 856.1 nm, P = 600.0 mW (I = 928 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 856.5 nm, P = 600.0 mW (I = 931 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 854.9 nm, P = 600.0 mW (I = 948 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SE600	CWL = 856.5 nm, P = 600.0 mW (I = 939 mA), 25 °C	$727.02 Volume Pricing Available	Today
LD852-SEV600	852 nm, 600 mW, Ø9 mm TO Can, E Pin Code, VHG Wavelength-Stabilized Single-Frequency Laser Diode	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.0 nm, P = 584.5 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	7-10 Days
LD852-SEV600	CWL = 852.5 nm, P = 624.9 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	7-10 Days
LD852-SEV600	CWL = 852.2 nm, P = 589.7 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.5 nm, P = 603.1 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.2 nm, P = 590.0 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.9 nm, P = 631.5 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.6 nm, P = 586.7 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.9 nm, P = 593.0 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.8 nm, P = 600.0 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
LD852-SEV600	CWL = 852.8 nm, P = 595.1 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today

LD852-SEV600	CWL = 852.5 nm, P = 563.5 mW (I = 970 mA),25 °C	$1,761.69 Volume Pricing Available	Today
L880P010	880 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$58.21 Volume Pricing Available	Today
L895VH1	895 nm, 0.2 mW, H Pin Code, VCSEL Diode	$164.67	Today

904 nm - 960 nm TO Can Laser Diodes

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L904P010		904 nm	10 mW	50 mA / 70 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
M9-940-0200		940 nm	200 mW	270 mA / 320 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
L960H1		960 nm	250 mW	400 mA / 430 mA	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.

Part Number	Description	Price	Availability
L904P010	904 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$30.28 Volume Pricing Available	7-10 Days
M9-940-0200	940 nm, 200 mW, Ø9 mm, A Pin Code, Laser Diode	$687.81 Volume Pricing Available	Today
L960H1	960 nm, 250 mW, Ø9 mm, H Pin Code, Laser Diode	$274.44 Volume Pricing Available	Today

976 nm - 980 nm TO Can Laser Diodes

Note: The rows shaded green below denote single-frequency laser diodes.

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L976SEV1[c]		976 nm	270 mW	350 mA / 400 mA[d]	Ø9 mm[e]	E	No	S8060 or S8060-4	Yes	Single Frequency[f]
L980P010		980 nm	10 mW	25 mA / 40 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L980P030		980 nm	30 mW	50 mA / 70 mA	Ø5.6 mm	A	Yes	S7060R	No	Single Transverse Mode
L980P100A		980 nm	100 mW	150 mA / 190 mA	Ø5.6 mm	A	Yes	S7060R	No	Multimode
L980H1		980 nm	200 mW	300 mA (Max)	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode[g]
L980P200		980 nm	200 mW	300 mA / 400 mA	Ø5.6 mm	A	Yes	S7060R	No	Multimode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. In order to achieve the specified performance, we recommend using the LDM90(/M) Laser Diode Mount and, when collimated, an NIR Optical Isolator; single frequency performance when collimated is only guaranteed with >35 dB isolation of back reflections.
d. The power can be tuned across the operating current range, given in the serial-number-specific documentation, while maintaining wavelength-stabilized, single-frequency performance within a stabilized temperature range.
e. The Ø9 mm package for this diode is 4.30 mm (0.17") thick, which is more than the standard Ø9 mm package thickness of 1.50 mm (0.06"). The diode will still be compatible with all Ø9 mm laser diode mounts; please see the *Drawing* tab in the blue info icon ( ) above for full package specifications. Mounting this diode in the LDM90(/M) mount requires two 2-56 screws, included with this diode.
f. Single Longitudinal Mode and Single Transverse Mode
g. At least 90% of the output power is within a single transverse mode.

Part Number	Description	Price	Availability
L976SEV1	976 nm, 270 mW, Ø9 mm TO Can, E Pin Code, VHG Wavelength-Stabilized Single-Frequency Laser Diode	$1,530.00	Today
L976SEV1	CWL = 976.7 nm, P = 262.5 mW (I = 350 mA),27 °C	$1,530.00	7-10 Days
L976SEV1	CWL = 976.2 nm, P = 248.9 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.3 nm, P = 245.9 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.5 nm, P = 251.5 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.6 nm, P = 263.6 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.5 nm, P = 255.9 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.3 nm, P = 254.8 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.2 nm, P = 245.3 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.3 nm, P = 245.9 mW (I = 350 mA),35 °C	$1,530.00	Today
L976SEV1	CWL = 976.0 nm, P = 259.3 mW (I = 350 mA),25 °C	$1,530.00	Today
L976SEV1	CWL = 976.6 nm, P = 263.4 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.4 nm, P = 233.4 mW (I = 350 mA),35 °C	$1,530.00	Today
L976SEV1	CWL = 976.5 nm, P = 262.6 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.7 nm, P = 257.0 mW (I = 350 mA),35 °C	$1,530.00	Today
L976SEV1	CWL = 976.7 nm, P = 229.4 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.5 nm, P = 267.2 mW (I = 350 mA),27 °C	$1,530.00	Today
L976SEV1	CWL = 976.6 nm, P = 257.5 mW (I = 350 mA),27 °C	$1,530.00	Today
L980P010	980 nm, 10 mW, Ø5.6 mm, A Pin Code, Laser Diode	$31.77 Volume Pricing Available	Today
L980P030	980 nm, 30 mW, Ø5.6 mm, A Pin Code, Laser Diode	$78.70 Volume Pricing Available	Today
L980P100A	980 nm, 100 mW, Ø5.6 mm, A Pin Code, MM, Laser Diode	$124.73 Volume Pricing Available	Today
L980H1	980 nm, 200 mW, Ø9 mm, H Pin Code, Laser Diode	$274.44	Today
L980P200	980 nm, 200 mW, Ø5.6 mm, A Pin Code, Laser Diode	$158.00 Volume Pricing Available	Today

1064 nm TO Can Laser Diodes

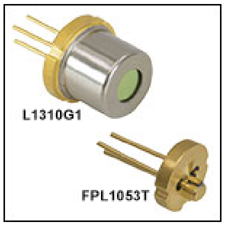
Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
M9-A64-0200	i	1064 nm	200 mW	280 mA / 350 mA	Ø9 mm	A	Yes	S8060 or S8060-4	No	Single Transverse Mode
L1064H1	i	1064 nm	300 mW	700 mA / 900 mA	Ø9 mm	H	No	S8060 or S8060-4	Yes	Single Transverse Mode
L1064H2	i	1064 nm	450 mW	1100 mA / 1200 mA	Ø9 mm	E	No	S8060 or S8060-4	No	Single Transverse Mode

a. Please see the blue info icons (i) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.

Part Number	Description	Price	Availability

M9-A64-0200	1064 nm, 200 mW, Ø9 mm, A Pin Code, Laser Diode	$496.55 Volume Pricing Available	Today
L1064H1	1064 nm, 300 mW, Ø9 mm, H Pin Code, Laser Diode	$274.44	Today
L1064H2	1064 nm, 450 mW, Ø9 mm, E Pin Code, Laser Diode	$494.00	Today

1270 nm - 1480 nm TO Can Laser Diodes



Note: The rows shaded green below denote single-frequency laser diodes.

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L1270P5DFB[c]		1270 nm	5 mW	15 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1290P5DFB[c]		1290 nm	5 mW	16 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1310P5DFB[c]		1310 nm	5 mW	16 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
ML725B8F		1310 nm	5 mW	20 mA / 35 mA	Ø5.6 mm	D	Yes	-	Yes	Single Transverse Mode
FPL1053T[e]		1310 nm	300 mW (Pulsed)	750 mA / 1000 mA	Ø5.6 mm	E	No	S7060R	No	Single Transverse Mode
L1310G1		1310 nm	2000 mW	5 A / 8 A	Ø9 mm	G	No	S8060 or S8060-4	No	Multimode
L1330P5DFB[c]		1330 nm	5 mW	14 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1370G1		1370 nm	2000 mW	5 A / 8 A	Ø9 mm	G	No	S8060 or S8060-4	No	Multimode
L1450G1		1450 nm	2000 mW	5 A / 8 A	Ø9 mm	G	No	S8060 or S8060-4	No	Multimode
L1470P5DFB[c]		1470 nm	5 mW	19 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1480G1		1480 nm	2000 mW	5 A / 8 A	Ø9 mm	G	No	S8060 or S8060-4	No	Multimode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. This diode includes an integrated aspheric focusing lens in the cap, allowing for the focus spot and numerical aperture to be matched to SMF-28e+ fiber.
d. Single Longitudinal Mode and Single Transverse Mode
e. This diode is available from stock in an open header package. It can be converted to a sealed TO can package by customer request. Please contact Tech Support for details.

Part Number	Description	Price	Availability
L1310P5DFB	1310 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1270P5DFB	Customer Inspired! 1270 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1290P5DFB	1290 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
ML725B8F	1310 nm, 5 mW, Ø5.6 mm, D Pin Code, Laser Diode	$57.61 Volume Pricing Available	Lead Time
FPL1053T	1310 nm, 300 mW Pulsed, Ø5.6 mm, E Pin Code	$424.09	Today

L1310G1	1310 nm, 2.0 W, Ø9 mm, G Pin Code, MM Laser Diode	$350.55	Today
L1330P5DFB	1330 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode With Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1370G1	1370 nm, 2.0 W, Ø9 mm, G Pin Code, MM Laser Diode	$378.50	Today
L1450G1	1450 nm, 2.0 W, Ø9 mm, G Pin Code, MM Laser Diode	$351.72	Today
L1470P5DFB	1470 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1480G1	1480 nm, 2.0 W, Ø9 mm, G Pin Code, MM Laser Diode	$354.04	Today

1490 nm - 1650 nm TO Can Laser Diodes

Note: The rows shaded green below denote single-frequency laser diodes.

Item #	Info	Wavelength	Power[a]	Typical/Max Drive Current[a]	Package	Pin Code	Monitor Photodiode[b]	Compatible Socket	Wavelength Tested	Laser Mode
L1490P5DFB[c]		1490 nm	5 mW	24 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1510P5DFB[c]		1510 nm	5 mW	20 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1530P5DFB[c]		1530 nm	5 mW	21 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1550P5DFB[c]		1550 nm	5 mW	20 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
ML925B45F		1550 nm	5 mW	30 mA / 50 mA	Ø5.6 mm	D	Yes	-	No	Single Transverse Mode
FPL1055T[e]		1550 nm	300 mW (Pulsed)	750 mA / 1000 mA	Ø5.6 mm	E	No	S7060R	No	Single Transverse Mode
L1550G1		1550 nm	1700 mW	5 A / 8 A	Ø9 mm	G	No	S8060 or S8060-4	No	Multimode
L1570P5DFB[c]		1570 nm	5 mW	25 mA / 40 mA	Ø5.6 mm	D	Yes	-	Yes	Single Frequency[d]
L1575G1		1575 nm	1700 mW	5 A / 8 A	Ø9 mm	G	No	S8060 or S8060-4	No	Multimode
FPL1054T[e]		1625 nm	200 mW (Pulsed)	750 mA / 1000 mA	Ø5.6 mm	E	No	S7060R	No	Single Transverse Mode
FPL1059T[e]		1650 nm	225 mW (Pulsed)	750 mA / 1000 mA	Ø5.6 mm	E	No	S7060R	No	Single Transverse Mode

a. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
b. Laser diodes with a built-in monitor photodiode can operate at constant power.
c. This diode includes an integrated aspheric focusing lens in the cap, allowing for the focus spot and numerical aperture to be matched to SMF-28e+ fiber.
d. Single Longitudinal Mode and Single Transverse Mode
e. This diode is available from stock in an open header package. It can be converted to a sealed TO can package by customer request. Please contact Tech Support for details.

Part Number	Description	Price	Availability
L1550P5DFB	1550 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1490P5DFB	1490 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1510P5DFB	1510 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36	Today

		Volume Pricing Available	
L1530P5DFB	1530 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
ML925B45F	1550 nm, 5 mW, Ø5.6 mm, D Pin Code, Laser Diode	$57.61 Volume Pricing Available	Today
FPL1055T	1550 nm, 300 mW Pulsed, Ø5.6 mm, E Pin Code	$424.09	Today
L1550G1	1550 nm, 1.7 W, Ø9 mm, G Pin Code, MM Laser Diode	$355.20	Today
L1570P5DFB	1570 nm, 5 mW, Ø5.6 mm, D Pin Code, DFB Laser Diode with Aspheric Lens Cap	$92.36 Volume Pricing Available	Today
L1575G1	1575 nm, 1.7 W, Ø9 mm, G Pin Code, MM Laser Diode	$356.39	Today
FPL1054T	1625 nm, 200 mW Pulsed, Ø5.6 mm, E Pin Code	$466.86	Today
FPL1059T	1650 nm, 225 mW Pulsed, Ø5.6 mm, E Pin Code	$509.62	Today

3.40 µm TO Can Fabry-Perot ICL

Item #	Info	Center Wavelength[a]	Power (Min)[b]	Max Operating Current[b]	Package[c]	Pin Code	Monitor Photodiode	Wavelength Tested	Laser Mode
IF3400T1		3.40 µm (2941 cm^{-1})	30 mW	600 mA	Ø9 mm	H	No	Yes	Single Transverse Mode

a. Fabry-Perot Lasers exhibit broadband emission. The center wavelength is defined as a weighted average over all the modes. Each device has a unique spectrum. To get the spectrum of a specific, serial-numbered device, click "Choose Item" below, then click on the Docs Icon next to the serial number of the device. If you need spectral characteristics different than those shown below, please contact Tech Support to request a custom laser.

b. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first. The Ø9 mm package for these diodes is 4.3 mm (0.17") thick, which is more than the standard 1.5 mm (0.06"). The laser will still be compatible with all

c. Ø9 mm laser mounts; please see the *Drawing* tab in the blue info icon ( ) above for full package specifications.

Part Number	Description	Price	Availability
IF3400T1	NEW! Fabry-Perot Interband Cascade Laser, 3.40 µm CWL, 30 mW, Ø9 mm, H Pin Code	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.26 µm, 30 mW (356 mA), 25 °C	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.22 µm, 30 mW (298 mA), 25 °C	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.23 µm, 30 mW (291 mA), 25 °C	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.23 µm, 30 mW (265 mA), 25 °C	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.24 µm, 30 mW (384 mA), 25 °C	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.23 µm, 30 mW (365 mA), 25 °C	$4,285.00	Today
IF3400T1	NEW! Center Wavelength: 3.24 µm, 30 mW (298 mA), 25 °C	$4,285.00	Today

3.85 µm - 9.5 µm TO Can Fabry-Perot QCLs

Item #	Info	Center Wavelength[a]	Power (Min)[b]	Max Operating Current[b]	Package[c]	Pin Code	Monitor Photodiode	Wavelength Tested	Laser Mode
QF3850T1		3.85 µm (2597 cm^{-1})	200 mW	600 mA	Ø9 mm	H	No	Yes	Single Transverse Mode
QF4050T2		4.05 µm (2469 cm^{-1})	70 mW	400 mA	Ø9 mm	H	No	Yes	Single Transverse Mode
QF4050T1		4.05 µm (2469 cm^{-1})	300 mW	600 mA	Ø9 mm	H	No	Yes	Single Transverse Mode

QF4600T2		4.60 µm (2174 cm^{-1})	200 mW	500 mA	Ø9 mm	H	No	Yes	Single Transverse Mode
QF4600T1		4.60 µm (2174 cm^{-1})	400 mW	800 mA	Ø9 mm	H	No	Yes	Single Transverse Mode
QF4600T3		4.60 µm (2174 cm^{-1})	1000 mW	800 mA	Ø9 mm	H	No	Yes	Single Transverse Mode
QF9500T1		9.5 µm (1053 cm^{-1})	300 mW	800 mA	Ø9 mm	H	No	Yes	Single Transverse Mode

a. Fabry-Perot Lasers exhibit broadband emission. The center wavelength is defined as a weighted average over all the modes. Each device has a unique spectrum. To get the spectrum of a specific, serial-numbered device, click "Choose Item" below, then click on the Docs Icon next to the serial number of the device. If you need spectral characteristics different than those shown below, please contact Tech Support to request a custom laser.
b. Please see the blue info icons ( ) above for absolute maximum power and current specifications. Do not exceed these values, whichever occurs first.
c. The Ø9 mm package for these diodes is 4.3 mm (0.17") thick, which is more than the standard 1.5 mm (0.06"). The laser will still be compatible with all Ø9 mm laser mounts; please see the *Drawing* tab in the blue info icon ( ) above for full package specifications

Part Number	Description	Price	Availability
QF3850T1	**Fabry-Perot Quantum Cascade Laser, 3.85 µm CWL, 200 mW, Ø9 mm, H Pin Code**	**\$3,860.96 Volume Pricing Available**	**Today**
QF3850T1	**Center Wavelength: 3.86 µm, 200 mW (344 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF3850T1	**Center Wavelength: 3.86 µm, 200 mW (362 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF3850T1	**Center Wavelength: 3.86 µm, 200 mW (358 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF3850T1	**Center Wavelength: 3.86 µm, 200 mW (344 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF3850T1	**Center Wavelength: 3.86 µm, 200 mW (368 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF4050T2	**Fabry-Perot Quantum Cascade Laser, 4.05 µm CWL, 70 mW, Ø9 mm, H Pin Code**	**\$1,606.50**	**Today**
QF4050T2	**Center Wavelength: 4.01 µm, 70 mW (228 mA), 25 °C**	**\$1,606.50**	**Today**
QF4050T2	**Center Wavelength: 4.06 µm, 70 mW (243 mA), 25 °C**	**\$1,606.50**	**Today**
QF4050T2	**Center Wavelength: 4.02 µm, 70 mW (251 mA), 25 °C**	**\$1,606.50**	**7-10 Days**
QF4050T2	**Center Wavelength: 4.02 µm, 70 mW (187 mA), 25 °C**	**\$1,606.50**	**7-10 Days**
QF4050T1	**Fabry-Perot Quantum Cascade Laser, 4.05 µm CWL, 300 mW, Ø9 mm, H Pin Code**	**\$3,860.96 Volume Pricing Available**	**Today**
QF4050T1	**Center Wavelength: 3.99 µm, 300 mW (360 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF4050T1	**Center Wavelength: 3.99 µm, 300 mW (367 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF4050T1	**Center Wavelength: 3.96 µm, 300 mW (371 mA), 25 °C**	**\$3,860.96 Volume Pricing Available**	**Today**
QF4600T2	**Fabry-Perot Quantum Cascade Laser, 4.60 µm CWL, 200 mW, Ø9 mm, H Pin Code**	**\$1,981.35 Volume Pricing Available**	**Today**
QF4600T2	**Center Wavelength: 4.56 µm, 200 mW (274 mA), 25 °C**	**\$1,981.35 Volume Pricing Available**	**7-10 Days**
QF4600T2	**Center Wavelength: 4.55 µm, 200 mW (278 mA), 25 °C**	**\$1,981.35 Volume Pricing Available**	**Today**
QF4600T2	**Center Wavelength: 4.55 µm, 200 mW (281 mA), 25 °C**	**\$1,981.35 Volume Pricing Available**	**Today**
QF4600T2	**Center Wavelength: 4.57 µm, 200 mW (288 mA), 25 °C**	**\$1,981.35 Volume Pricing Available**	**Today**
QF4600T2	**Center Wavelength: 4.56 µm, 200 mW (271 mA), 25 °C**	**\$1,981.35 Volume Pricing Available**	**Today**

QF4600T2	Center Wavelength: 4.55 µm, 200 mW (323 mA), 25 °C	$1,981.35 Volume Pricing Available	Today
QF4600T1	Fabry-Perot Quantum Cascade Laser, 4.60 µm CWL, 400 mW, Ø9 mm, H Pin Code	$3,860.96 Volume Pricing Available	Today
QF4600T1	Center Wavelength: 4.53 µm, 400 mW (518 mA), 25 °C	$3,860.96 Volume Pricing Available	7-10 Days
QF4600T1	Center Wavelength: 4.63 µm, 400 mW (373 mA), 25 °C	$3,860.96 Volume Pricing Available	Today
QF4600T1	Center Wavelength: 4.59 µm, 400 mW (319 mA), 25 °C	$3,860.96 Volume Pricing Available	Today
QF4600T1	Center Wavelength: 4.60 µm, 400 mW (341 mA), 25 °C	$3,860.96 Volume Pricing Available	Today
QF4600T1	Center Wavelength: 4.61 µm, 400 mW (327 mA), 25 °C	$3,860.96 Volume Pricing Available	Today
QF4600T1	Center Wavelength: 4.61 µm, 400 mW (380 mA), 25 °C	$3,860.96 Volume Pricing Available	Today
QF4600T3	Fabry-Perot Quantum Cascade Laser, 4.60 µm CWL, 1000 mW, Ø9 mm, H Pin Code	$5,997.60 Volume Pricing Available	Today
QF4600T3	Center Wavelength: 4.62 µm, 1000 mW (610 mA), 25 °C	$5,997.60 Volume Pricing Available	7-10 Days
QF4600T3	Center Wavelength: 4.61 µm, 1000 mW (562 mA), 25 °C	$5,997.60 Volume Pricing Available	7-10 Days
QF4600T3	Center Wavelength: 4.62 µm, 1000 mW (640 mA), 25 °C	$5,997.60 Volume Pricing Available	Today
QF4600T3	Center Wavelength: 4.62 µm, 1000 mW (625 mA), 25 °C	$5,997.60 Volume Pricing Available	Today
QF4600T3	Center Wavelength: 4.60 µm, 1000 mW (610 mA), 25 °C	$5,997.60 Volume Pricing Available	Today
QF9500T1	Fabry-Perot Quantum Cascade Laser, 9.5 µm CWL, 300 mW, Ø9 mm, H Pin Code	$3,860.96 Volume Pricing Available	Today
QF9500T1	Center Wavelength: 9.30 µm, 300 mW (525 mA), 25 °C	$3,860.96 Volume Pricing Available	7-10 Days
QF9500T1	Center Wavelength: 9.21 µm, 300 mW (532 mA), 25 °C	$3,860.96 Volume Pricing Available	Today
QF9500T1	Center Wavelength: 9.23 µm, 300 mW (533 mA), 25 °C	$3,860.96 Volume Pricing Available	Today

ML725B8F - 1310 nm, 5 mW, Ø5.6 mm, D Pin Code, Mitsubishi Laser Diode

Specifications | Drawings

Optical Electrical Characteristics (T_{CASE} = 25 °C, P = 5 mW)				
Characteristic	Min	Typ.	Max	Unit
Center Wavelength	1290	1310	1330	nm
Operating Voltage	-	1.1	1.5	V
Beam Divergence (FWHM) - Parallel	-	25	-	deg.
Beam Divergence (FWHM) - Perpendicular	-	30	-	deg.
Operating Current	-	20	35	mA
Threshold Current	-	5	15	mA
Monitor Current	0.1	0.5	-	mA
Slope Efficiency	0.3	0.5	-	mW/mA

Absolute Maximum Ratings[a]		
Characteristic	Value	Unit
Optical Output Power (CW)	10	mW
LD Reverse Voltage	2	V
PD Reverse Voltage	20	V
PD Forward Current	2	mA
Operating Case Temperature	-40 to 85	°C
Storage Temperature	-40 to 100	°C

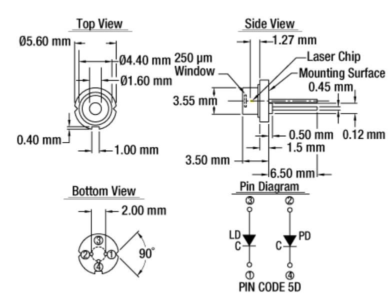
a. Absolute Maximum Rating specifications should never be exceeded. Operating beyond these conditions can seriously damage the laser. For more information, please see the Laser Diode Tutorial.

General Specifications	
Characteristic	Value
Monitor Photodiode	Yes[a]
Package	Ø5.6 mm
Pin Code	D
Compatible Socket	-
Laser Mode	Single Transverse Mode
Wavelength Tested	Yes[b]

a. Laser diodes with a built-in monitor photodiode can operate at constant power.
b. For the center wavelengths currently available or to place an order for a specific available wavelength, please contact Technical Support.

ML725B8F - 1310 nm, 5 mW, Ø5.6 mm, D Pin Code, Mitsubishi Laser Diode

Specifications | Drawings



ML725B8F - 1310 nm, 5 mW, Ø5.6 mm, D Pin Code, Mitsubishi Laser Diode