

Nm laser diode small size



AI Overview

Compact laser diodes are available in sizes as small as 3.3 mm, offering a range of wavelengths and integrated modules suitable for portable and precision applications.

Compact Laser Diode Options

TO-Can Packaged Diodes: Standard TO-can packages are available in diameters of 3.8 mm, 5.6 mm, 9 mm, and 9.5 mm, with various pin configurations for easy mounting. These diodes can be temperature-tuned to slightly adjust the lasing wavelength, and some are offered as wavelength-tested units for precise applications (Thorlabs).

Compact LDM Modules: Self-contained laser diode modules integrate the diode, optics, and focusing lens in a small form factor. For example, Edmund Optics offers 1 mW 780 nm LDM modules that are durable, compact, and focusable, suitable for alignment, scanning, robotic control, and measurement applications.

Low-Cost OEM Modules: Laser Components provides ultra-small modules with diameters down to 3.3 mm, including 780 nm and 850 nm options. These modules combine the diode, drive electronics, and optics in a metal housing, making them ideal for compact, low-cost applications such as dot or line lasers.

Consumer Mini Modules: Small red laser diodes, such as 650 nm modules with 6 mm diameter, are widely available for DIY, educational, or low-power applications. These modules are lightweight, durable, and easy to drive with simple DC circuits.

Key Considerations

Wavelength: Choose based on application; common small-sized diodes include 650 nm (red), 780 nm (near-infrared), and 850 nm.

Output Power: Typically ranges from 1 mW to several tens of mW for compact modules.

Form Factor: Smaller diameters (3.3–6 mm) are ideal for integration into portable or space-constrained devices.

Optics: Some modules include adjustable lenses for elliptical or circular beams, suitable for alignment or scanning tasks.

Power Supply: Many compact modules require an external power supply; ensure compatibility with voltage and current ratings. These small-sized laser diodes are widely used in alignment, measu...

Article Content

Gweike G1 Laser Enclosure

Diode lasers operate around 445–450 nm and are rated Class 4 — the highest laser hazard class. Cutting and engraving wood, acrylic, leather, painted, stained, or sealed materials releases smoke

Sculpfun A9 Ultra IR Fiber Laser Engraver Enclosure

The Sculpfun A9 Ultra IR Fiber Laser Engraver Enclosure by Clearview Plastics is a made-to-fit safety and ventilation upgrade built specifically for the Sculpfun A9 Ultra — the 400 × 400 mm

ADL-63502TL AlGaInP Visible Laser Diode 638nm 50mW

Features Small size Single transverse mode High performance in temperature characteristic

Mini Laser Diode Module • EIT LASERTECHNIK

EIT Laser's Mini Laser Diode Modules offer a powerful combination of compactness, efficiency, and versatility. These modules are characterized by their small size,

Laser Diodes, Modules | Optoelectronics | DigiKey

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RLECS 10-Pack 3.3V 650nm Mini Small Red Laser Dot

The laser head consists of a luminescent tube core, a condenser lens and a

LaserPecker LP4 Dual Laser Engraver with Diode & IR Lasers

LaserPecker LP4 is a fast dual-laser engraver (2W IR & 10W diode laser) with 4000mm/s speed. It can engrave most materials and cut

48 Laser Diode Manufacturers in 2026

Laser diodes (LDs) are widely used in consumer information equipment because of their small size, low power consumption, and low cost. They're also lightweight, efficient, and highly reliable.

0.5W 405nm Laser Diode Component

Smallest Spot Size for Extra SMALL engravings! This is the smallest spot size laser we sell, so you can do the highest resolution engravings or cut with the smallest

Infrared Laser Module 3W 1064 nm by xTool

The device operates on an infrared laser with a wave length of 1064 nm and is intended for direct marking and engraving of metals and some types of plastics within a working area of 300 × 294 mm.

Laser Hair Removal Cost 2026: Global Prices,

Alexandrite Laser (755 nm) The Alexandrite laser is one of the most widely used devices for hair removal treatments. Advantages Very fast treatment

635nm and 650nm Mini LasersMini Laser diode • EIT

Mini Laser diode Lightweight, low power (<5mW) for industrial alignment,

xTool M2 20W 455nm Diode Laser Module

Technical Features of xTool M2 20W 455nm Diode Upgrade Laser Module Blue diode laser 455 nm: wavelength optimized for working with organic and synthetic materials. Optical power 20 W: allows

Laser Diodes and Modules

Within the BAL series, wavelengths between 653 and 1,120 nm are available with output powers between 1 and 19 W in cw mode or even up to 90 W in pulse

The Latest & Best Laser Hair Removal Technologies in

Diode Lasers (808–810 nm) Diode lasers provide deeper penetration and are effective across a broader range of skin types. They are often used for

Laser Diodes by Wavelength

Laser diodes, which are capable of converting electrical current into light, are available from Thorlabs with center wavelengths in the 375 - 2000 nm range and

1mW 780nm Compact LDM Laser Diode Module

Compact LDM Focusable Laser Diode Modules are self-contained and compact and offer a variety of features. They are an ideal replacement for a helium-neon laser in many applications and offer the

Laser diode

The laser diode chip removed and placed on the eye of a needle for scale A laser diode with the case cut away. The laser diode chip is the small black chip at the

Laser Diodes - Mouser

Laser diodes are available at Mouser Electronics from industry leading manufacturers. Mouser is an authorized distributor for many laser diode manufacturers including ams Osram, KYOCERA AVX,

5 Best Fiber Laser Engravers and Cutters for Precision

Discover the best fiber laser engravers and cutters for fast, high-precision work on metal, plastics, coated materials, and more.

1mW 780nm Compact LDM Laser Diode Module

Compact LDM Focusable Laser Diode Modules ideal as a HeNe laser replacement with superior durability and small size are available at Edmund Optics.

Wiley Online Library

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Use of both the diode and Er: YAG lasers in esthetic ...

Infiltrative anesthesia with lidocaine was administered and the surgical guide was placed. A high-intensity 1.5 W diode laser (976 nm) continuous wavelength was used in a con-tact technique.

Laser Diodes: Ø3.8 mm, TO-46, Ø5.6 mm, Ø9 mm, and

Laser diodes with a built-in monitor photodiode can operate at constant power. This laser diode has a built in Zener diode to help protect against damage from small

List of laser types

This is a list of laser types, their operational wavelengths, and their applications. Thousands of kinds of laser are known, but most of them are used only for specialized research.

Contact Us

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