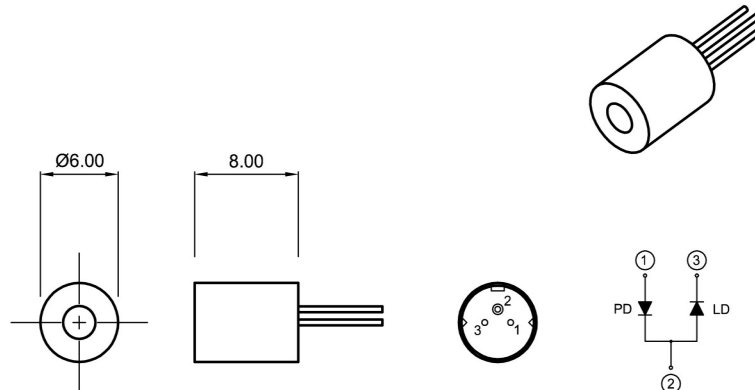


## Laser diode collimator, compact, 635-639nm



### Warranty

All laser diode collimators are covered by a two year warranty. Specifications are subject to change without notice. E&OE.

### Laser Safety

The light emitted from these devices has been set in accordance with IEC60825. However, staring into the beam, whether directly or indirectly, must be avoided. IEC60825 classifies laser products into 3 categories depending on light emitted, wavelength and eye safety.

#### CLASS II: "CAUTION"

Visible laser light less than 1.0mW. Considered eye-safe, normal exposure to this type of beam will not cause permanent damage to the retina.

#### CLASS IIIR: "DANGER"

Visible laser light between 1.0mW and 5.0mW. Considered eye-safe with caution. Focusing of this light into the eye could cause some damage.

#### CLASS IIIB: "DANGER"

Infrared (IR) and high power visible lasers considered dangerous to the retina if exposed.

**NB:** Please note that, while complying with the above classifications, unless otherwise stated our laser diode products are not certified and are designed solely of use in OEM products. The way the device is used in the final product may alter its original design classification and it is the responsibility of the OEM to ensure compliance with the relevant standards.

### Heat Sinking

Please note that premature or sudden catastrophic laser diode failure may occur if the maximum operating temperature is exceeded. For optimal laser diode lifetime we recommend our laser diode modules and collimators are provided with an additional form of external heat-sinking. The lower the operating temperature of the laser diode, the longer will be its lifetime.

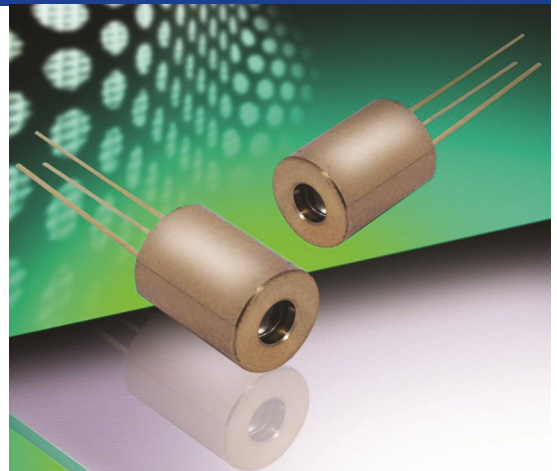
## Laser diode collimator, compact, 635-639nm

Compact, 6mm diameter, 635nm and 639nm laser diode collimators with fixed collimating/focus lens and bore-sighted beam.

They consist of a 635nm or 639nm infrared laser diode, a laser diode holder, a collimating lens holder and a high numerical aperture (NA) aspherical collimating lens. By adjusting the distance between the laser diode and the collimating lens, the factory-fixed beam can be set for a collimated or focused output to meet customer requirements.

Applications include medical and industrial alignment, industrial instrumentation and sensing.

Laser diode collimators from the Optoelectronics Company are available in other wavelengths and in a wide range of optical output powers to customer specifications.



### Specifications (typical figures at 25°C)

Part number	500-020010	500-020011	500-020012
Wavelength (nm)	635	639	639
Max. power (mW)	0.9	5.0	10.0
Typ. operating current (mA)	30	45	70
Pointing stability (mrad/°C)	<0.2	<0.2	<0.2
Bore sighting (half angle, °)	<2.5	<2.5	<2.5
Beam diameter (mm)	2.5 x 2	2.5 x 2	2.5 x 2
Beam divergence (mrad, collimated beam)	1 x 0.6	1 x 0.6	1 x 0.6
Operating temperature (non-condensing, °C)	-10 to +50	-10 to +50	-10 to +50
Storage temperature (°C)	-40 to +85	-40 to +85	-40 to +85
Housing material	Brass	Brass	Brass

### Key features

- Fixed optics
- Compact, ergonomic design
- Bore-sighted beam
- Collimated or focused output

### Applications

- Medical alignment
- Industrial alignment
- Sensing and positioning
- Industrial instrumentation