

Diode Collimator Assembly

Features

- Visible wavelength
- Elliptical collimated beam
- Low cost sub assembly including laser diode and lens
- User adjustable focus
- High Reliability



The Diode Collimator Assembly (DCA) is a low cost sub-assembly which incorporates the laser diode, collimating lens within a small package.

Applications

- Industrial and automotive alignment
- Positioning and sensing
- Bar code scanning
- Process control
- Machine vision
- Targeting applications

Fitted with a 650nm 5mW laser diode the unit produces an elliptically collimated beam with small beam diameter.

Since the DCA has no internal driver board it therefore requires an external board to be connected via the diode pins provided.



MECHANICAL SPECIFICATIONS

Length	10 mm
Diameter	7.5 mm
Housing	Brass

OPTICAL SPECIFICATIONS

	Min	Typ	Max	Unit
Diode Power		5		mW
Wavelength		650		nm
Optical collimated output power		3.5		mW
Slope Efficiency	0.4	0.6	0.8	mW / mA
Lasing Wavelength	650	655	660	nm

ELECTRICAL SPECIFICATIONS

	Min	Typ	Max	Unit
Operating Voltage		2.15	2.6	V
Operating Current		27	35	mA
Threshold Current		20	30	mA
Monitor Current	0.1	0.2	0.5	mA
Laser Diode reverse Voltage		2		V
Photo Diode reverse Voltage		30		V

ENVIRONMENTAL SPECIFICATIONS

Case Temperature	-10°C to +60°C
Storage Temperature	-40°C to +85°C

Specifications are typical at 25°C unless otherwise stated

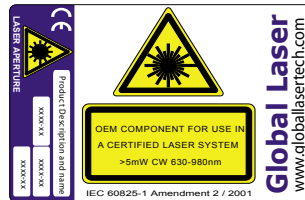
ELECTROSTATIC HANDLING & EARTHING ADVICE

The users of the Diode Collimator Assembly should abide by electrostatic handling guidelines as touching the laser diode can cause the laser diode to malfunction. Please note that the pins are soldered together for shipping to prevent any electrostatic & handling problems.

The laser diode collimator is connected to 0 Volts. A heat sink should be used so the case temperature does not exceed the maximum temperature under all conditions of operation and environment.

LASER SAFETY

The Diode Collimator Assembly does not include a laser driver circuit, therefore output powers cannot be set in accordance with EN60825 since they are designed for OEM use and not certified user devices as defined in the specification. The manufacturer of the complete laser product is responsible for complying with the requirements of EN60825. Manufacturers of products using laser diode collimators should be fully familiar with EN60825 before using such devices. An example of a Global Laser OEM laser label is shown below.



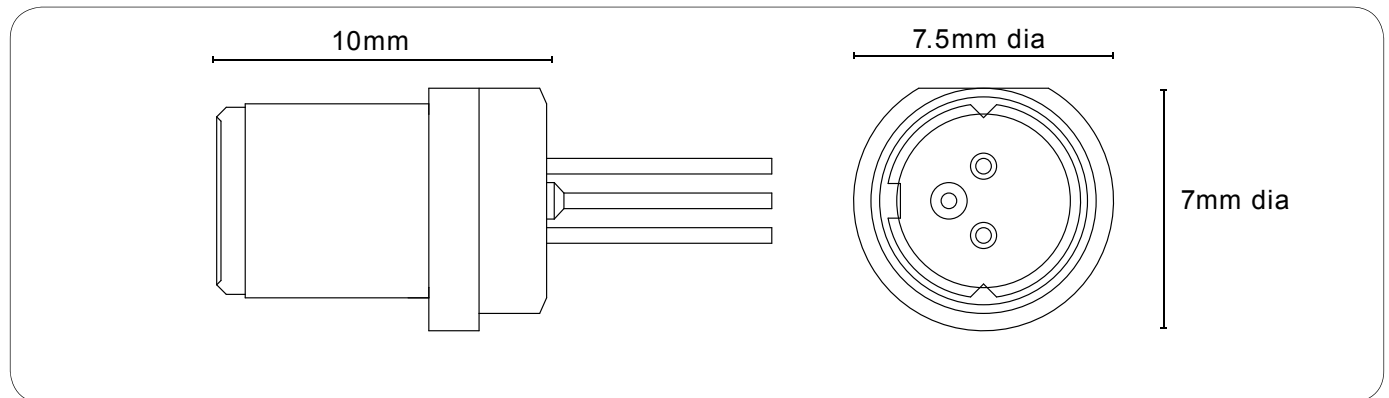
OEM Laser Label

QUALITY

Our manufacturing operations are certified to ISO9001.



DIMENSIONS



Please note: Global Laser reserve the right to change descriptions and specifications without notice



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For further information about the Diode Collimator Assembly you can contact your local distributor or you can contact Global Laser in the UK.

Your Local Distributor Is: