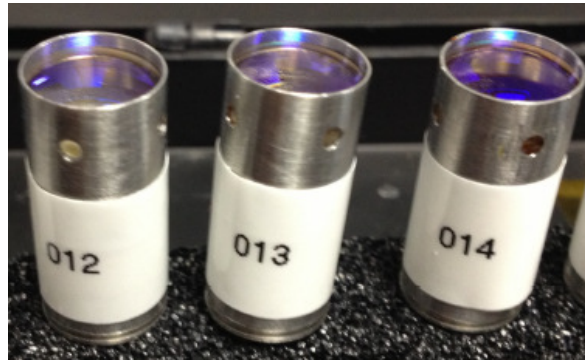




**PRINCETON**  
**OPTRONICS**

## 1mW 650nm Collimated VCSEL Module Model PCW-TO-001-W0650-0.5



### Specifications

Parameter	TO-650nm-1mW-0.5mrad
Wavelength	645-655nm
Driving Current	0.5-4mA
Compliance Voltage	1.9-2.5V
Output Power	0-1.0mW
Beam Diameter* at 0 meter	3.65mm
Beam Diameter* at 16 meter	<9.0 mm
Beam Diameter* at 32 meters	<16.0 mm
Divergence	<0.39mrad
Operating Temperature	10-50°C

\* Beam Diameter is defined as  $1/e^2$  intensity diameter

\*\* Full Angle Divergence

Copyright © 2013 Princeton Optronics, Inc.  
All Rights Reserved.

Princeton Optronics reserves the right to change product design and specifications at any time without notice.

No license is granted by implication or otherwise under any patents or patent right of Princeton Optronics. No responsibility is assumed for the use of these products, nor for any infringement on the rights of others resulting from the use of these products

Laser diode product components are intended for use in a user-devised end system. However, these products are capable of emitting Class IIIB radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precautions should operate a laser product. Directly viewing the laser beam or exposure to specular reflections must be avoided.

Serious injury may result if any part of the body is exposed to the beam. The eye is extremely sensitive to the infrared radiation and therefore, proper eye-wear must be worn at all times. Use of optical instruments with these products may increase eye hazard. Always wear eye protection when operating.



Princeton Optronics, Inc. \* 1 Electronics Drive \* Mercerville, New Jersey 08619

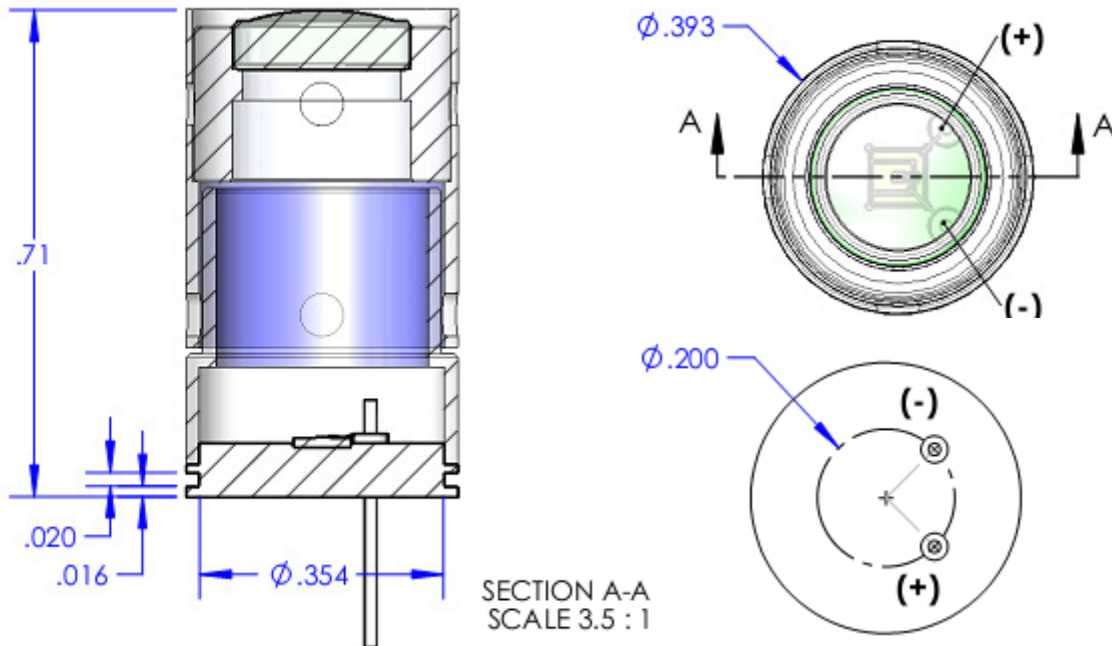
Voice: (609) 584-9696 \* Fax: (609) 584-2448 \* E-mail: sales@princetonoptronics.com \* www.princetonoptronics.com



## 1mW 650nm Collimated VCSEL Module Model PCW-TO-001-W0650-0.5

### Mechanical Drawing

Size: 0.71" (18mm) L x 0.393" (10mm) Dia.



Copyright © 2013 Princeton Optronics, Inc.  
All Rights Reserved.

Princeton Optronics reserves the right to change product design and specifications at any time without notice.

No license is granted by implication or otherwise under any patents or patent right of Princeton Optronics. No responsibility is assumed for the use of these products, nor for any infringement on the rights of others resulting from the use of these products

Laser diode product components are intended for use in a user-devised end system. However, these products are capable of emitting Class IIIB radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precautions should operate a laser product. Directly viewing the laser beam or exposure to specular reflections must be avoided. Serious injury may result if any part of the body is exposed to the beam. The eye is extremely sensitive to the infrared radiation and therefore, proper eye-wear must be worn at all times. Use of optical instruments with these products may increase eye hazard. Always wear eye protection when operating.



Princeton Optronics, Inc. \* 1 Electronics Drive \* Mercerville, New Jersey 08619

Voice: (609) 584-9696 \* Fax: (609) 584-2448 \* E-mail: sales@princetonoptronics.com \* www.princetonoptronics.com