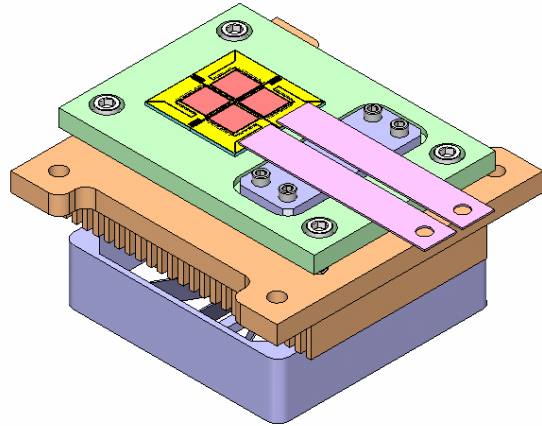


## Multichip VCSEL Array Module(480W-QCW) Part # PQCW-TEC-480-W0808

- Vertical-Cavity Surface-Emitting Laser technology
- Four 120W QCW chips mounted together for total QCW power 480W
- Duty cycle to 25%
- 808nm wavelength
- Custom wavelengths available (808-1064nm)
- Applications– End pumping of Nd:YAG laser (QCW)



### Optical & Electrical Characteristics

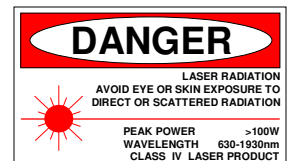
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
QCW Output Power	90A, 20C Water	480	520	--	W
Threshold current	20C	--	8	12	A
Operating current	480W, 20C	--	75	90	A
Operating voltage	480W, 20C	--	17.6	22	V
Differential resistance	20C	--	113	150	mΩ
Center wavelength	480W, 20C	805	808	811	nm
Spectral width (FWHM)	480W, 20C	--	1	3	nm
Wavelength shift	20C	0.060	0.065	0.070	nm/°C
Divergence (half angle)	480W, 20C	--	0.15	0.2	rad

Copyright © 2010 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 IV 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.

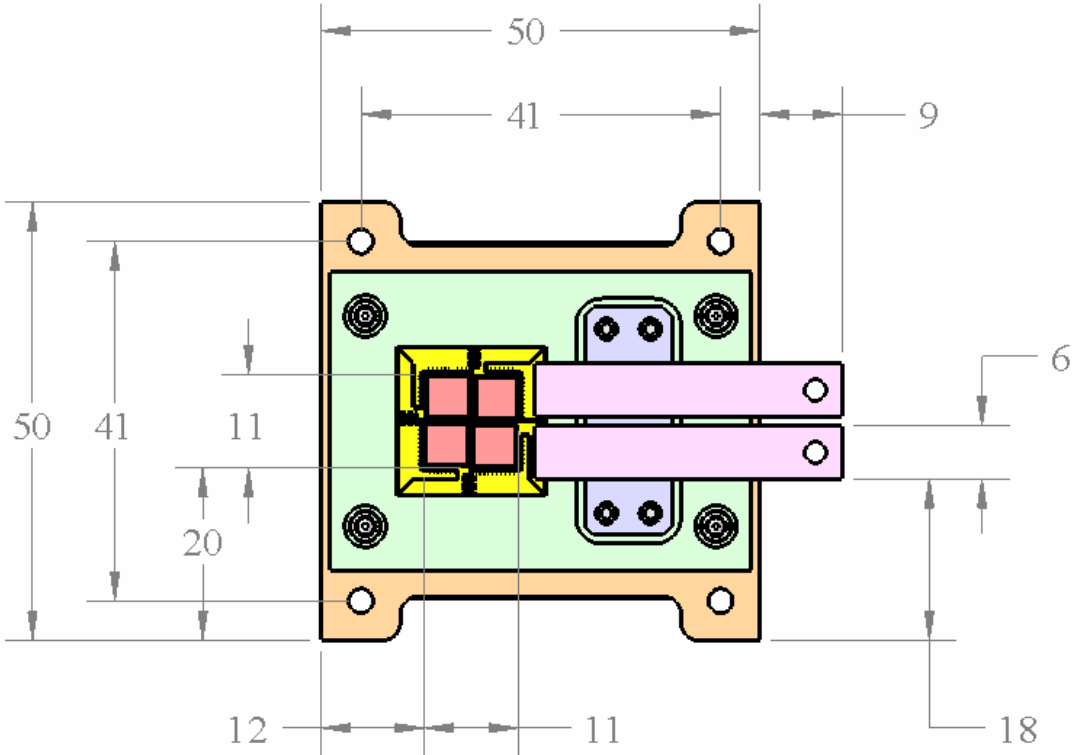


REV. A – 03/10

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

# Module Dimensions

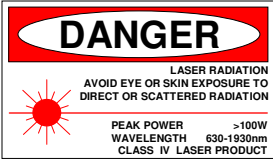


Copyright © 2010 Princeton Optronics, Inc.  
All Rights Reserved.

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 IV 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.



REV. A – 03/10

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