

# 15W CW 808nm VCSEL Module, 1mm/0.44NA Fiber Part # PCW-M10-15-W0808 (Preliminary)

- Vertical-Cavity Surface-Emitting Laser technology
- 1mm/0.44NA fiber
- Very high reliability, can operate at high temperatures (up to 80 °C)
- Wavelength stabilized & narrow spectral width (<1nm)
- Easily soldered to heat exchanger

## **Optical & Electrical Characteristics**

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Output Power	22A, 20C Heat-sink	15	17		W
Threshold current	20C Heat-sink		4	6	А
Operating current	15W, 20C Heat-sink		20	22	Α
Operating voltage	15W, 20C Heat-sink		2.4	3.1	V
Differential resistance	15W, 20C Heat-sink		45	50	$m_\Omega$
Slope efficiency	20C Heat-sink	0.8	0.9		W/A
Center wavelength	15W, 20C Heat-sink	800	808	816	nm
Spectral width (FWHM)	15W, 20C Heat-sink		0.8	1.5	nm
Wavelength shift	20C Heat-sink			0.070	nm/°C

#### **Maximum Absolute Ratings**

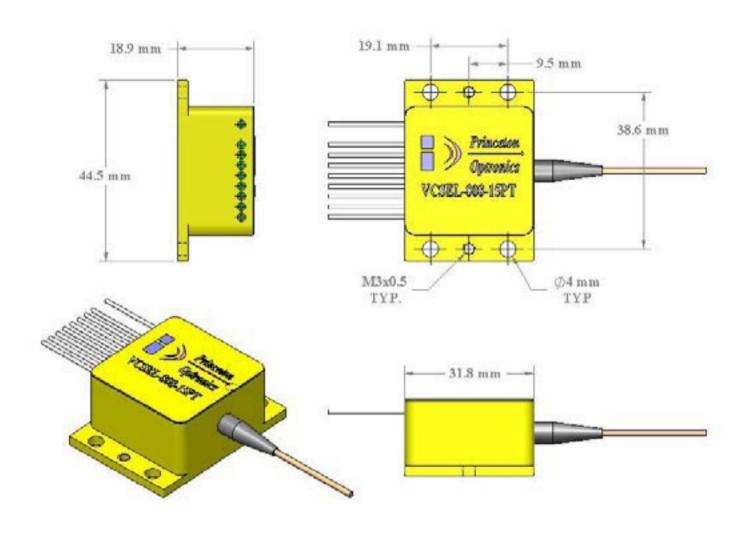
PARAMETER	CONDITIONS		
Forward current	30A		
Reverse current	25 <sub>μ</sub> Α		
Operating temperature	0 to +80 °C		
Storage temperature	-40 to +80 °C		

### **Ordering information**

PCW - M10 - 15 - W0808 \_Wavelength (nm) Package type. CW Output Power (W)



#### **Mechanical Characteristics**



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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.



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