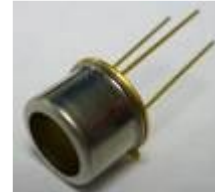


## 2W Multi-Mode 975nm VCSEL Part # PCW-CS-2-W0975

- Vertical-Cavity Surface-Emitting Laser technology
- 2W multi-mode power at 975nm
- Circular, low-diverging beam
- Custom wavelengths available (808-1064nm)



### Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Single-mode Power	3A, 20C Heat-sink	2	2.5	--	W
Threshold current	20C Heat-sink	--	0.3	0.5	A
Operating current	2W, 20C Heat-sink	--	2.5	3	A
Operating voltage	2W, 20C Heat-sink	--	2.3	2.8	V
Differential resistance	2W, 20C Heat-sink	--	0.33	1	$\Omega$
Slope efficiency	20C Heat-sink	0.9	1.05	--	W/A
Conversion efficiency	0.5W, 20C	40	45	--	%
Center wavelength	2W, 20C Heat-sink	965	975	985	nm
Wavelength shift	20C Heat-sink	0.060	0.065	0.070	nm/ $^{\circ}$ C
Beam divergence <sup>(1)</sup>	2W, 20C Heat-sink	--	0.17	0.2	rad
Emission area diameter	--	--	300	--	microns

1. Half-width,  $1/e^2$

### Ordering information

**PCW – CS – 2 – W0975**

Package type \_\_\_\_\_ Wavelength (nm) \_\_\_\_\_  
 BC=Die; CS=Chip-on-submount; \_\_\_\_\_ CW Output Power (W) \_\_\_\_\_  
 CM=C-mount; TO=TO-can \_\_\_\_\_

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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.



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