2W 688 nm VCSEL Array on CE-Mount

PCW-CE-2-W0688

- *Vertical-Cavity Surface-Emitting Laser technology*
- *Uniform and low speckle illumination*
- *Operates at high temperatures with high reliability*
- *Wavelength stabilized (0.07 nm per ^{0}C) & narrow spectral width (< 1nm typ.)*

Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Output Power	I_{OP}, 20^{0}C Heat-sink	--	2	--	W
Threshold current	20^{0}C Heat-sink	--	1	--	A
Operating current	P_{OUT} , 20^{0}C Heat-sink	--	3.5	--	A
Operating voltage	P_{OUT}, 20^{0}C Heat-sink	--	2.4	--	V
Conversion efficiency	P_{OUT}, 20^{0}C Heat-sink	--	22	--	%
Center wavelength	P_{OUT}, 20^{0}C Heat-sink	683	688	693	nm
Wavelength shift	20^{0}C Heat-sink	0.060	0.065	0.07	nm/°C
Beam Divergence (1)	P_{OUT}, 20^{0}C Heat-sink	--	0.17	0.2	rad
Beam Divergence (2)	P_{OUT}, 20^{0}C Heat-sink	--	19.5	23	°
Emission area	--	--	1.5 x 1.5	--	mm^2

(1) Half-width 1/e^2
(2) Full-width 1/e^2

Maximum Absolute Ratings

PARAMETER	CONDITIONS
Forward current	TBD
Reverse current	TBD
Operating temperature	0 to +80°C
Storage temperature	-40 to +80°C

Ordering information

PCW – CE – 2 – W0688

- CE: Heat spreader type
- 2: CW Output Power (W)
- W0688: Wavelength (nm)

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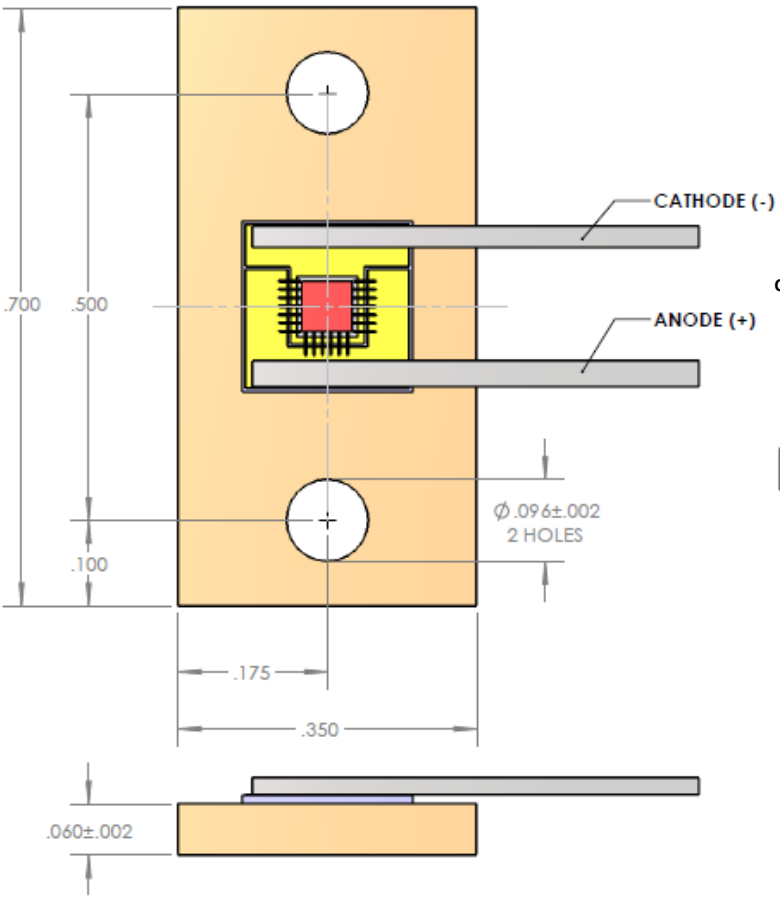
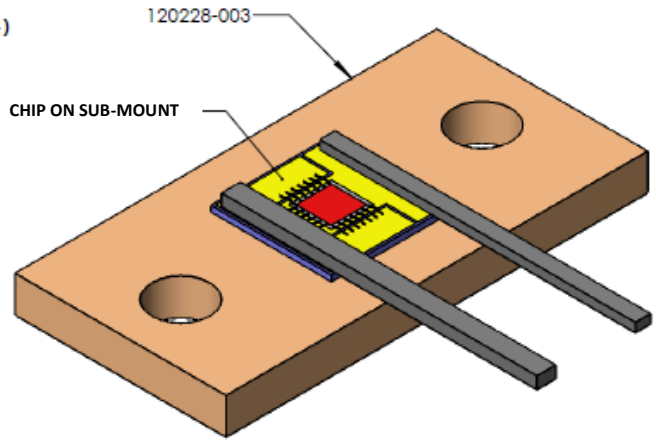
Mechanical Characteristics

PARAMETER	VALUE
Package width	0.350 ± 0.01 mm
Package length	0.700 ± 0.01 mm
Package height	0.66 ± 0.002 mm
Light emitting area	1.5 x 1.5 mm^2





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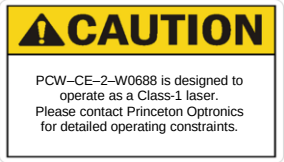
Laser diode product components are intended for use in a user-devised end system. However, these products are capable of emitting Class IV radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precautions should operate a laser product. Directly 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 – 01/17

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