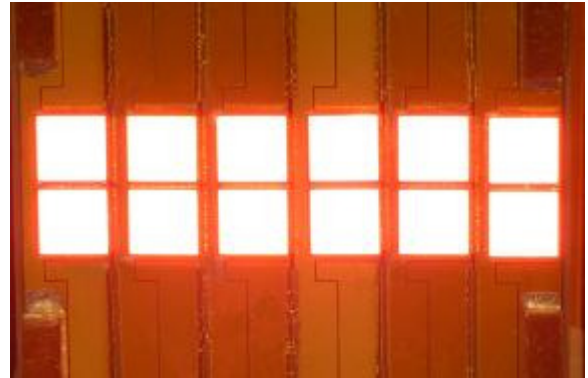


Multi-chip VCSEL Array Module kW-class (QCW) for Side Pumping of Solid-State Lasers Part # PQCW-SP-1000-W0808

- Vertical-Cavity Surface-Emitting Laser technology
- Uniform pumping & reliable operation
- Simple packaging
- Twelve 100W QCW chips mounted together for a total QCW power of 1200W
- 808nm wavelength, 250 μ s operation
- Custom wavelengths available (780-1100nm)
- Applications: Side pumping of Nd:YAG laser (QCW) as flash-lamp pump replacement



Optical & Electrical Characteristics (1)

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
QCW Output Power	250A, 20C	1000	1200	--	W
Threshold current	20C	--	8	12	A
Operating current	1000W, 20C	--	200	250	A
Operating voltage	1000W, 20C	--	17.6	22	V
Differential resistance	20C	--	113	150	m Ω
Center wavelength	1000W, 20C	804	808	809	nm
Spectral width (FWHM)	1000W, 20C	--	1	3	nm
Wavelength shift	20C	0.060	0.065	0.070	nm/ $^{\circ}$ C
Divergence (half angle)	1000W, 20C	--	0.15	0.2	rad

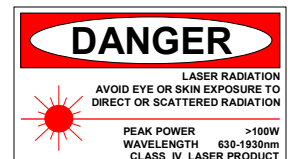
(1) Optical & electrical characteristics specified under 250 μ s/4Hz QCW operation. Other operating conditions, such as 100 μ s/10Hz for example can be used.

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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.

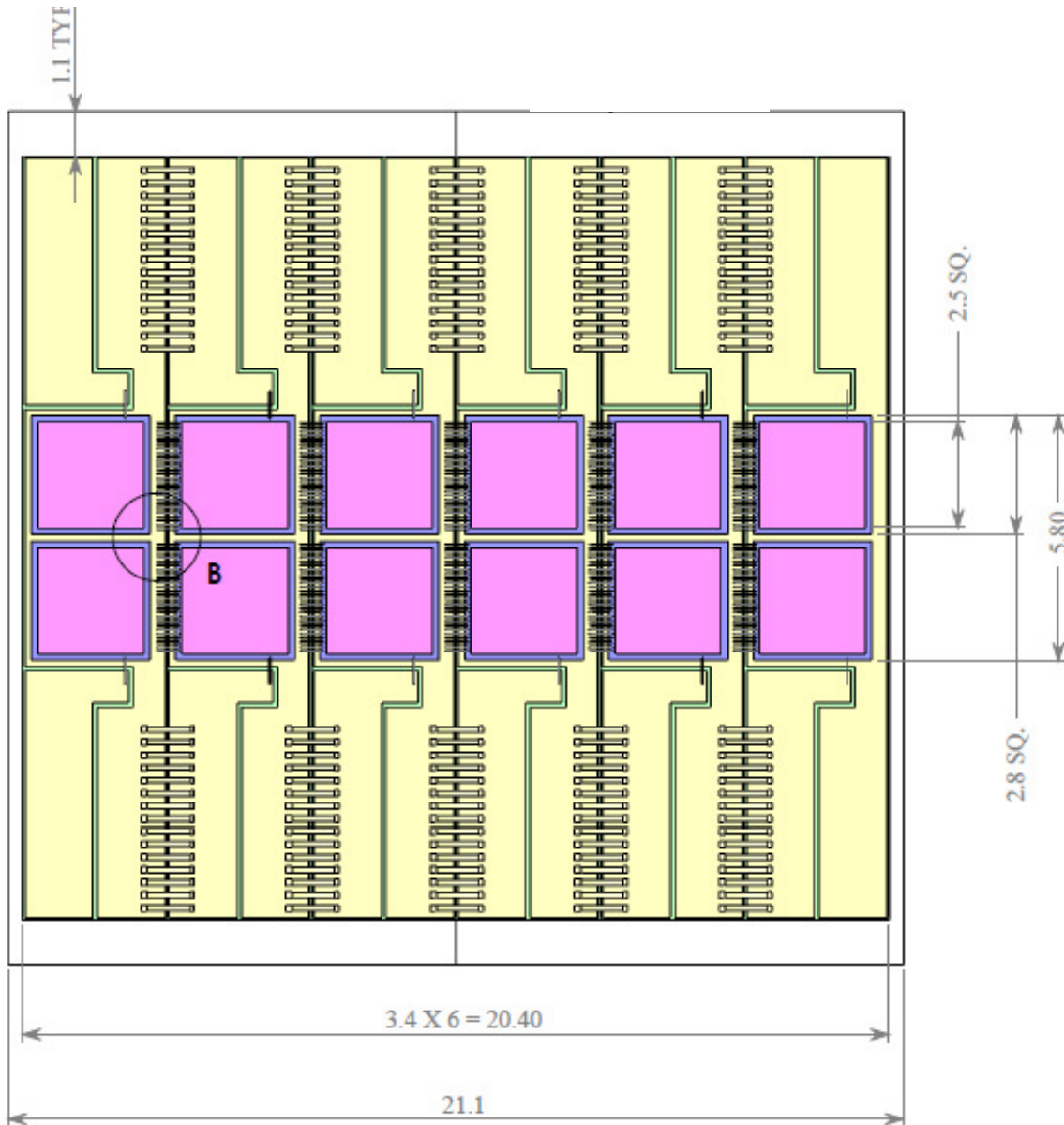


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Module Dimensions (mm)

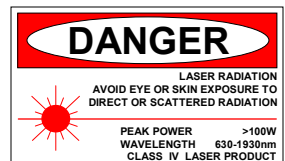


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