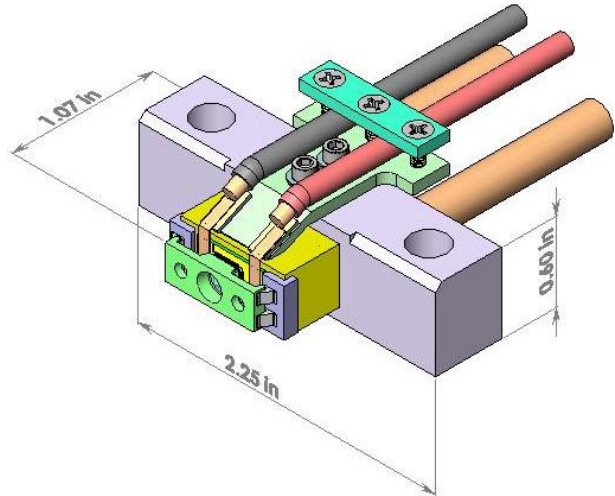


## High Brightness VCSEL Array (100W) Part # HBVA-100-W0975

- Vertical-Cavity Surface-Emitting Laser technology
- Power density of 60kW/cm<sup>2</sup> at focus
- Couples to 400μm/0.4NA fiber
- Wavelength stabilized, narrow linewidth
- Consists of several hundred single mode VCSEL devices
- Microlens mounted
- CW, pulse and QCW operation
- Custom wavelengths available (808-1064nm)
- 100 times reduction of the beam spot



### Optical & Electrical Characteristics

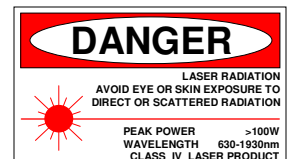
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Output Power	170A, 25C Heat-sink	100	110	--	W
Threshold current	25C Heat-sink	--	15	20	A
Operating current	100W, 25C Heat-sink	--	150	170	A
Operating voltage	100W, 25C Heat-sink	--	2.4	3	V
Differential resistance	25C Heat-sink	--	15	18	mΩ
Center wavelength	100W, 25C Heat-sink	965	975	985	nm
Spectral width (FWHM)	100W, 25C Heat-sink	--	0.8	1	nm
Wavelength shift	25C Heat-sink	0.060	0.065	0.070	nm/°C
Divergence (half angle)	100W, 25C Heat-sink	--	24	30	mrad
Emission diameter	--	--	4.2	--	mm

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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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