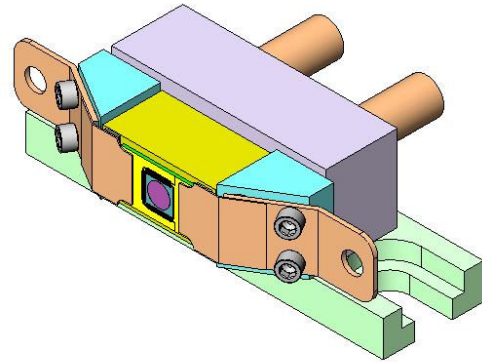


**100W CW 975nm VCSEL Array on
Microcooler
Part # PMC1-W975-100**

- *Vertical-Cavity Surface-Emitting Laser technology*
- *Very high reliability, can operate at high temperatures (up to 50 °C water temp)*
- *Can be operated without chillers*
- *Low thermal resistance (~0.16 °C/W)*
- *Wavelength stabilized & Narrow spectral width*
- *Custom wavelength available (808nm-1064nm)*



Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
CW Output Power	135A, 25C Heat-sink	100	110	--	W
Threshold current	25C Heat-sink	--	16	20	A
Operating current	100W, 25C Heat-sink	--	125	135	A
Operating voltage	100W, 25C Heat-sink	--	2.1	2.5	V
Differential resistance	100W, 25C Heat-sink	--	5.8	7.0	mΩ
Slope efficiency	25C Heat-sink	0.85	0.95	--	W/A
Conversion efficiency	55W, 25C Heat-sink	40	43	--	%
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
N.A. (4-sigma)	100W, 25C Heat-sink	--	0.15	0.17	--
Emission area	--	--	4.7x4.7	--	mm ²

Maximum Absolute Ratings

PARAMETER	CONDITIONS
Forward current	280A
Reverse current	25μA
Operating temperature	0 to +80 °C
Storage temperature	-40 to +80 °C