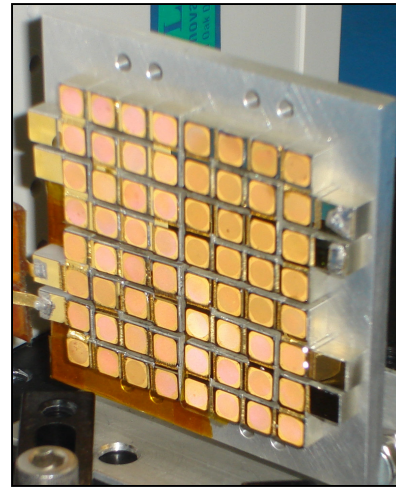


High Energy VCSEL Array (10mJ/20nS)
Part # HEVA-W0975-10mJ

- Vertical-Cavity Surface-Emitting Laser technology
- >10mJ pulse energy at 30nS pulse at 980 nm
- Bottom-side emission
- Consists of 8x8 VCSEL arrays connected in series
- Custom wavelengths available (808-1064nm)
- Single and multimode arrays available

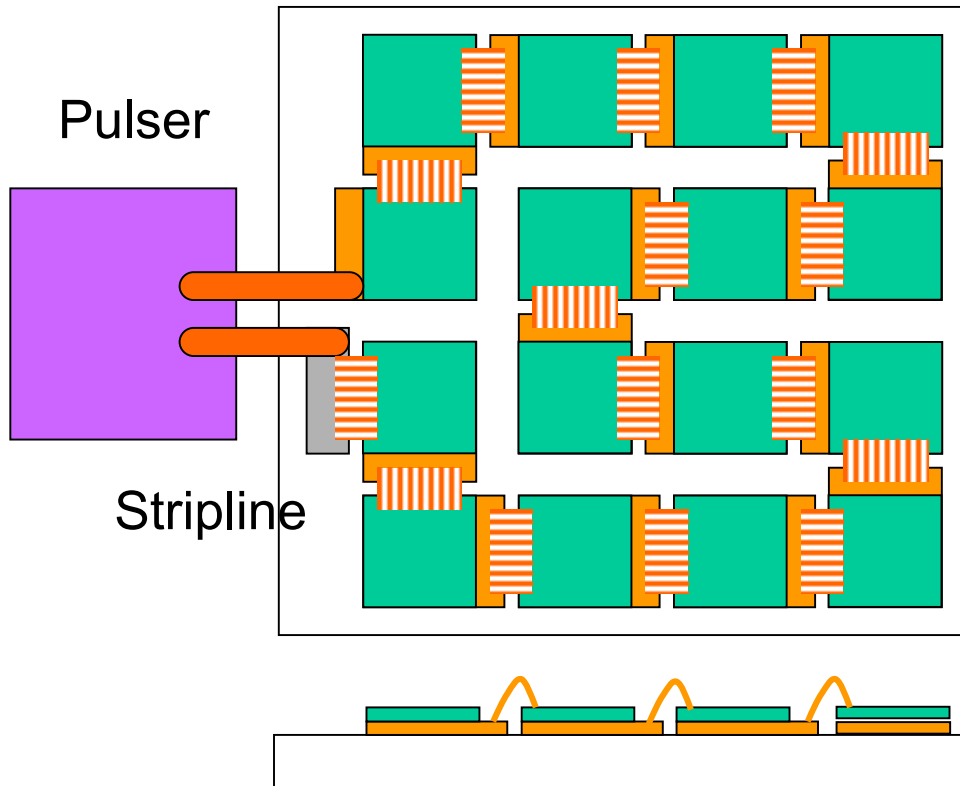


Optical & Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
Pulse Energy	30nS Pulse	8	10	--	mJ
Pulse Duration (variable)	10 to 100nS	10	30	100	nS
Pulse Current	Peak	--	1.5	--	kA
Pulse rise time	0-95%	--	10	--	nS
Pulse fall time	100-5%	--	10	--	nS
Size	For 10mJ array	--	5x5x0.5	--	cm
Conversion efficiency	Electrical to optical	--	35	--	%
Center wavelength	Array wavelength	--	975	--	nm
Beam divergence	1/e ² Half angle	--	8	--	Deg

Other information:

Wiring Scheme:



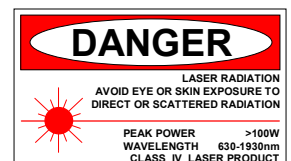
Above shows the wiring scheme for a 4x4 array
Similar scheme has been used for the 8x8 array

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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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