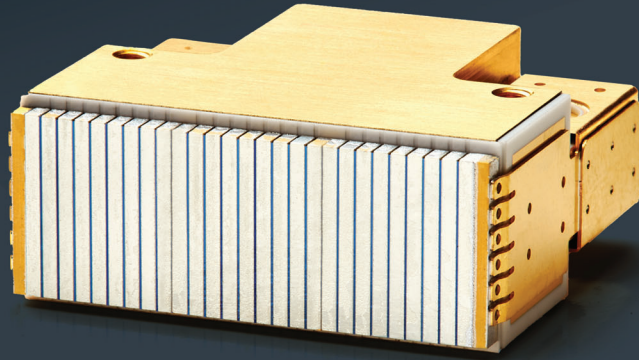


# FLUID COOLED LASER DIODE ARRAYS

## T6 STANDARD PRODUCTS - LONG PULSED



Leonardo's fluid-cooled T6 laser diode array offers exceptional reliability, high performance, ruggedness, and brightness in a compact package. With its patented monolithic design, this cutting-edge solution features efficient cooling with filtered water or alternative fluids and a scalable design for flexible integration. The T6 is an ideal solution for a wide range of industrial, medical, and scientific applications.

### KEY FEATURES

- Multiple wavelengths available from 760 nm to 1700 nm
- Monolithic, fully soldered construction
- Cooling path isolated from the electrical path
- Designed for close-packed 2D arrangement
- Lowest bar-bar pitch available on the market
- Stackable micro-optics plates for beam conditioning and wavelength stabilization

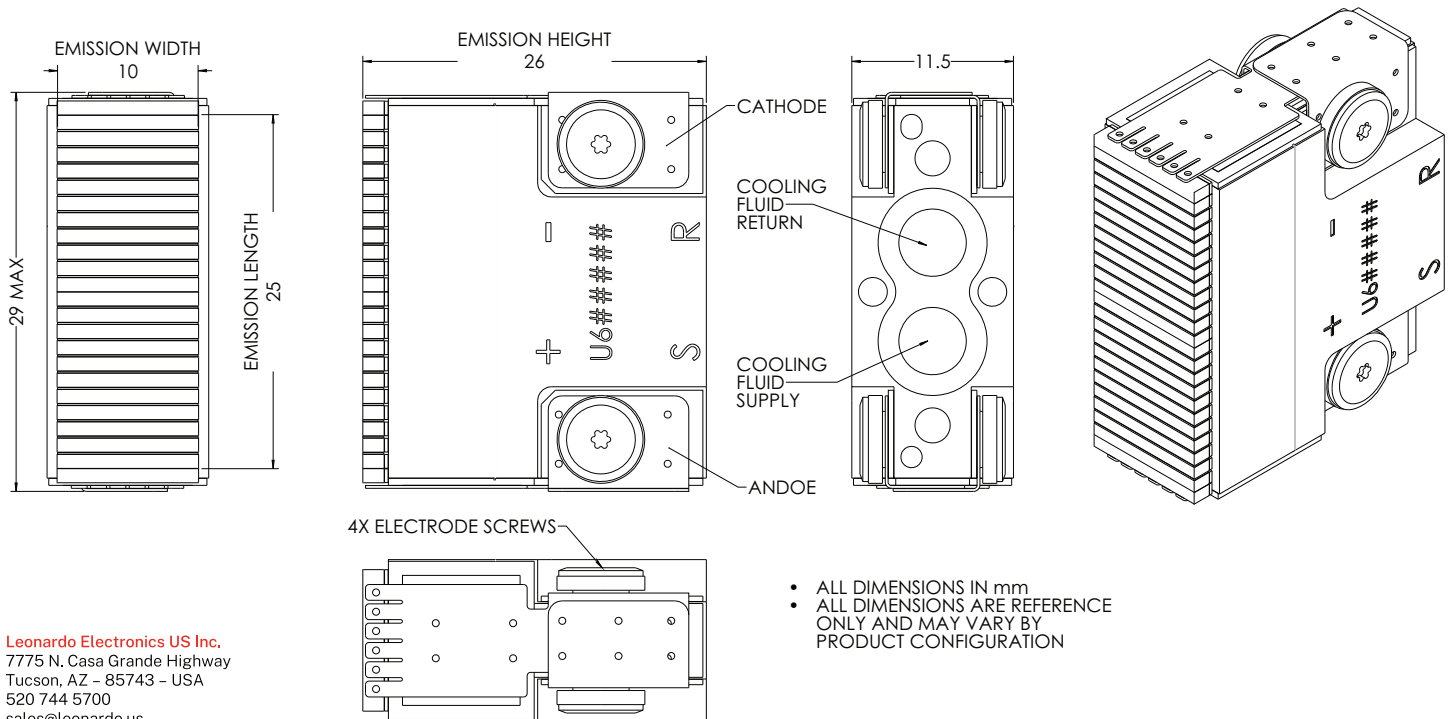
### KEY BENEFITS

- Pump source tailored for a large range of gain media
- Compatible with harsh operating and storage requirements
- Compatible with multiple cooling fluids and schemes
- High brightness scaling to MW-class modules

## TYPICAL FLUID COOLED LASER DIODE ARRAYS (T6 STANDARD PRODUCTS – LONG PULSED) SPECIFICATIONS

Typical Parameters	Units	LP-SWL800-2250	LP-SWL800-960 LP-SWL760-960	LP-SWL1060-1070	LP-MWL760/800- 2000	LP-MWL800/1060 -2400	LP-MWL760/810/ 1064-960	LP-MWL760/810/ 1064-1200
<b>Optical</b>								
Output Power	W	2250	960	1070	2000	2400	960	1200
Number of Bars	-	20	12	8	20	20	12	15
Typical Center Wavelength	nm	800	800 or 760	1060	760 & 800	800 & 1060	760 & 810 & 1064	760 & 810 & 1064
Spectral Width (FWHM)	nm	11	6	6	Multi-WL	Multi-WL	Multi-WL	Multi-WL
Vertical Beam Divergence (FWHM)	°	35	35	4.5	35	35	35	35
Horizontal Beam Divergence (FWHM)	°	10	10	10	10	10	10	10
<b>Electrical</b>								
Conversion Efficiency	%	53	45	58	55	55	45	45
Threshold Current	A	19	15	15	23	22	22	15
Operating Current	A	120	84	155	100	120	84	90
Operating Voltage	V	34	22	12	36	36	22	27
Maximum Pulse Width	ms	50	50	10	30	40	50	50
Maximum Duty Cycle	%	30	50	3	9	12	50	50
<b>Thermal</b>								
Wavelength Temperature Coefficient	nm/°C	0.3	0.3	0.3	0.3	0.3	0.3	0.3
<b>Cooling Fluid</b>								
Operating Temperature (non-condensing)	°C	15-25	15-25	15-25	15-25	15-25	15-25	15-25
Filtered Particle Size	µm	10	10	10	10	10	10	10
Flow Rate	lpm	4	4	4	4	4	4	4
Pressure	psi	90	90	90	90	90	90	90

## MECHANICAL SPECIFICATIONS



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