



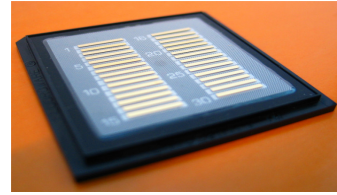
Modulight, Inc.

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TECHNICAL SPECIFICATION ML1279				
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TECHNICAL SPECIFICATION ML1279

1 OVERVIEW

Modulight's unmounted laser bar ML1279 is a 30% fill factor laser bar, designed for 40...50 W CW operation, with high power conversion efficiency. The 8xx nm range laser bars are available with different wavelength criteria and tolerance, per customer request, between wavelengths 785...810 nm. Please state the desired wavelengths when placing an order.



2 OPTO-ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ	Unit
Threshold Current	I_{th}	11.5	A
Optical Output	P_{opt}	50	W
Operating Voltage	V_{op}	< 2.0	V
Slope Efficiency	η	1.15	W/A
Center wavelength Tolerance		± 10	nm
Wavelength Temperature Coefficient	$\Delta\lambda_t$	0.3	nm/°C
Spectral Width	$\Delta\lambda$	< 4	nm
Beam Divergence (Slow)	$\theta_{ }$	5...10	°
Beam Divergence (Fast)	θ_{\perp}	23...24	°
Polarization		TM	

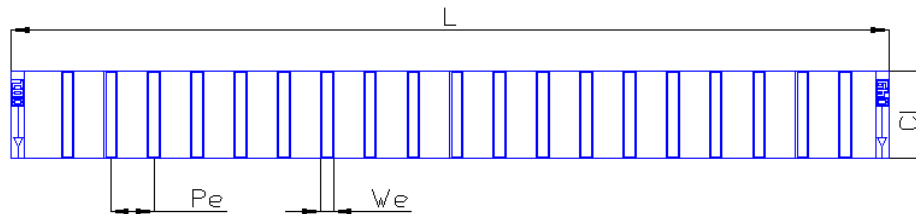
3 MECHANICAL SPECIFICATION

Parameter	Symbol		Unit
Cavity Length	CL	1000	μm
Emitter Width	W_e	150	μm
Bar Length	L	10	mm
Emitter Pitch	P_e	500	μm
Fill Factor	FF	30	%
Bar Thickness	t	130 ± 10	μm
Emitter Number		19	
p- and n-metal thickness		400	nm
Coating Overspray		< 20	μm



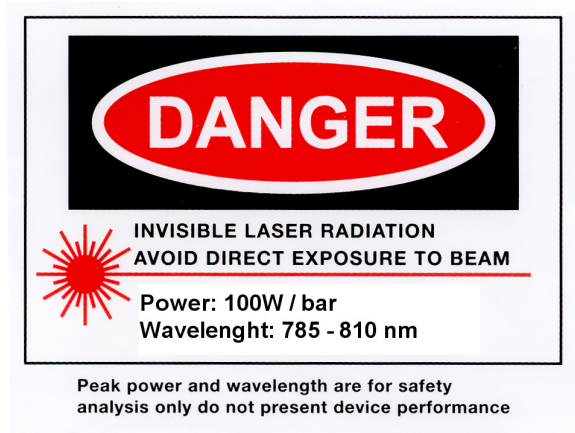
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4 BAR LAYOUT



5 SAFETY INFORMATION

- The laser light emitted from this laser diode is invisible and may be harmful to the human eye. Avoid eye exposure to the beam, both direct and reflected.
- Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload. Please take care of proper ESD protection prior to handling the products.
- These Modulight products are not intended for use in systems where product malfunction can reasonably be expected to result in personal injury.



6 LIABILITY NOTE

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