



Modulight, Inc.

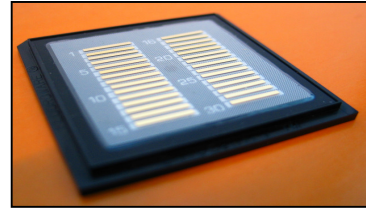
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TECHNICAL SPECIFICATION ML1277				
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TECHNICAL SPECIFICATION ML1277

1 OVERVIEW

Modulight's product ML1277 is a 30% fill factor unmounted laser bar, designed for 40 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 wavelength when ordering.



2 OPTO-ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ	Unit
Threshold Current	I _{th}	< 9	A
Optical Output	P _{opt}	40	W
Operating Voltage	V _{op}	< 2.0	V
Slope Efficiency	η	> 1.15	W/A
Center wavelength Tolerance		+/- 3	nm
Wavelength Temperature Coefficient	Δλ _t	0.3	nm/°C
Spectral Width	Δλ	<4	nm
Beam Divergence (Slow)	θ	5-10	degrees
Beam Divergence (Fast)	θ _⊥	30-35	degrees
Polarization		TM	

3 MECHANICAL SPECIFICATION

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

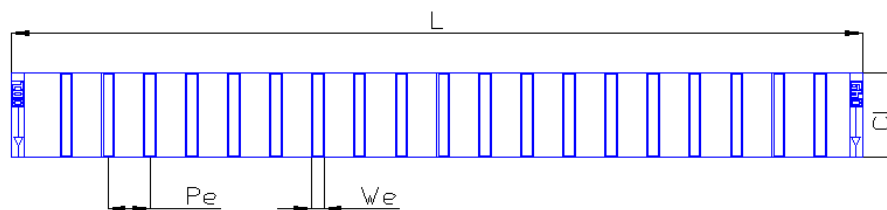


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4 BAR LAYOUT



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.



Peak power and wavelength are for safety analysis only do not present device performance

6 LIABILITY NOTE

- This document is sole property of Modulight, Inc. No part of this document may be copied without written acceptance of Modulight, Inc.
- All statements related to the products herein are believed to be reliable and accurate. However, the accuracy is not guaranteed and no responsibility is assumed for any inaccuracies or omissions. Modulight, Inc. reserves the right to make changes in the specifications at any time without prior notice.



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