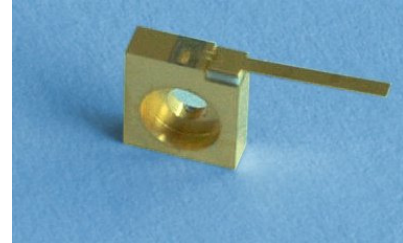


# ML1522

808 nm C-mounted high-power laser chip

## Overview

C-mounted single-emitter chips are versatile and convenient for bringing laser light in many different applications. ML1522 is a high-power 808 nm C-mounted laser chip CW applications. A member of the LumiLase product family, ML1111 provides efficient and stable laser light output. Adequate cooling should be ensured during operation.



## Applications

Defense	Industrial	Medical
Illumination	Materials Processing	Aesthetic Treatments

## Electro-optical Characteristics

Parameter	Symbol	Typical value	Unit
Peak Wavelength	$\lambda$	808	nm
Optical Output Power	$P_{OPT}$	2	W
Operating Current	$I_{OP}$	2.1	A
Operating Voltage	$V_{OP}$	2.0	V
Slope Efficiency	$\eta$	1.1	W/A
Threshold Current	$I_{TH}$	0.5	A
Wavelength - Temp. Coefficient	$\Delta\lambda/\Delta T$	0.3	nm/K
Spectral Width	$\delta\lambda$	4	nm
Parallel Beam Divergence (FWHM)	$\theta_{  }$	8	°
Perpendicular Beam Divergence (FWHM)	$\theta_{\perp}$	33	°

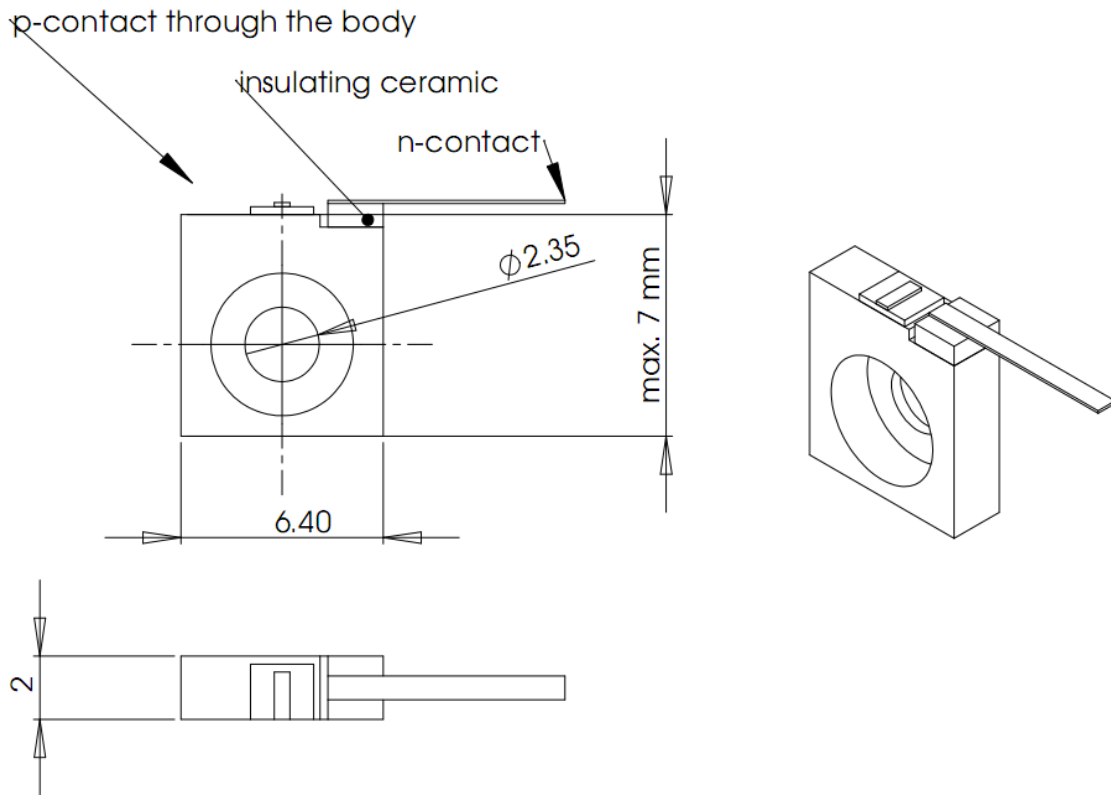
All above values are typical for CW operation @ 20°C.

## Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
LD Reverse Voltage	$V_{RLD}$	2	V
LD Forward Current	$I_{FLD}$	3	A
Operating Temperature	$T_{OP}$	0...40 <sup>1</sup>	°C
Storage Temperature	$T_{STG}$	-40...85	°C

<sup>1</sup> A non-condensing environment should be ensured over the useful temperature range.

### Package Information



### Safety Information

- The laser light emitted from this laser device is invisible and harmful to the human eye. Avoid eye and skin 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 ensure 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, not to present device performance.

### 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.