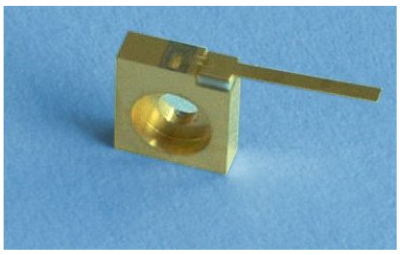
ML2085

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. ML2085 is a high-power 808 nm C-mounted laser chip for CW applications. A member of the LumiLase product family, ML2085 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	λ	808 +/-3	nm
Optical Output Power	P_{OPT}	1	W
Operating Current	I_{OP}	1.25	A
Operating Voltage	V_{OP}	1.8	V
Slope Efficiency	η	>1	W/A
Threshold Current	I_{TH}	0.2	A
Wavelength - Temp. Coefficient	$\Delta\lambda/\Delta T$	0.3	nm/K
Spectral Width	$\delta\lambda$	2.5	nm
Parallel Beam Divergence (FWHM)	$\theta\parallel$	10	°
Perpendicular Beam Divergence (FWHM)	$\theta\perp$	36	°

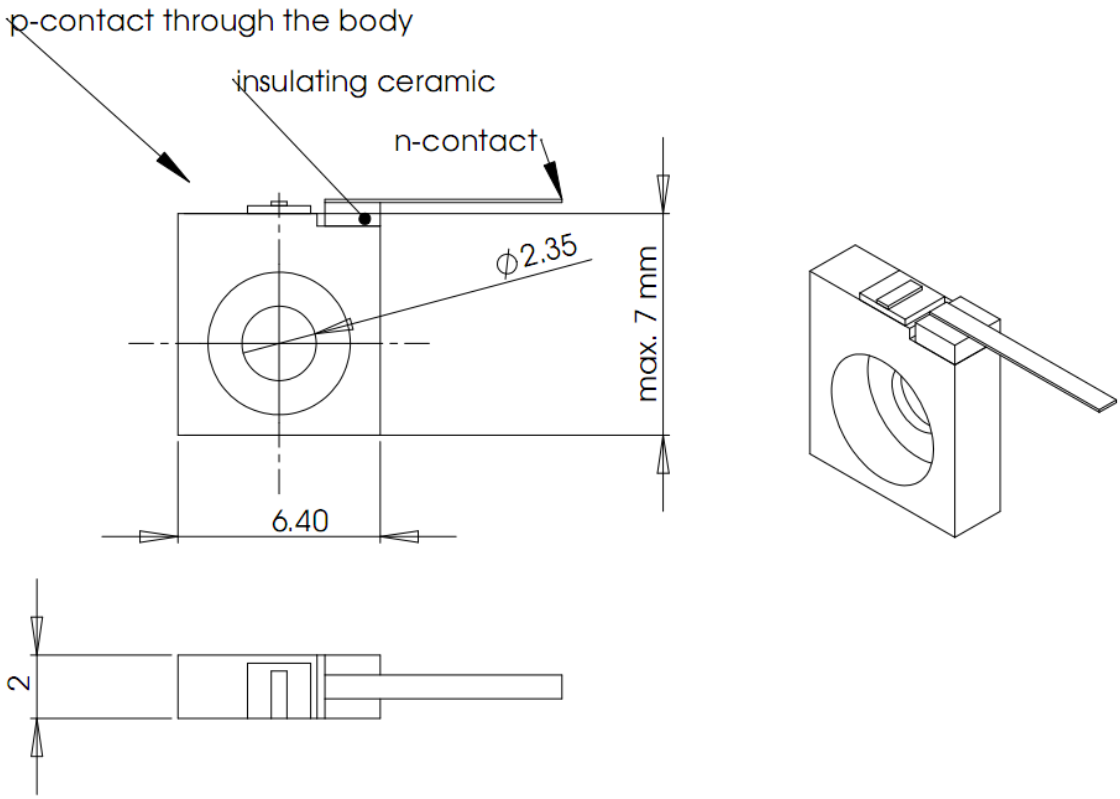
All above values are typical for CW operation @ 20°C.

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
LD Reverse Voltage	V_{RLD}	2	V
LD Forward Current	I_{FLD}	1.8	A
Operating Temperature	T_{OP}	0...40 [1]	°C
Storage Temperature	T_{STG}	-40...85	°C

[1] 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.



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