

OHD-C310-CC

70mW High Power CWDM DFB-LD Chip on Carrier, 1310nm

OHD-C310-CC is a distributed feedback (DFB) laser diode on carrier with CWDM wavelength 1310nm; it is designed for high power operation at commercial temperature range.

KEY FEATURES

- ✧ Over 70mW high power operation at commercial temperature range
- ✧ Symmetrical far field pattern to enable better optical coupling

APPLICATION

- ✧ SiPh

ELECTRICAL AND OPTICAL CHARACTERISTICS

Expected performance is not guaranteed. Assembly process may impact the parameter values.

ELECTRICAL AND OPTICAL CHARACTERISTICS (Test temperature= 25°C, unless otherwise specified)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I _{op}	Operating Current	P _o =80mW, T _{LD} =25°C			300	mA
		P _o =70mW T _{LD} =75°C			350	
I _{th}	Threshold Current	25°C		35		mA
		75°C		45		
V _{op}	Operating Voltage	P _o =70mW, T _{LD} = 75°C			2.0	V
λ _p	Peak Wavelength	P _o =70mW, T _{LD} = 0-75°C	1304.5		1317.5	nm
SMSR	Side Mode Suppression Ratio	T _{LD} = 25°C	35			dB
F _v	Far-field Angle, Vertical	FWHM		21		deg
F _h	Far-field Angle, Horizontal	FWHM		21		deg
RIN	Relative Intensity Noise	P _o = 70mW			-135	dB / Hz
PCE	Power conversion efficiency	250mA, 75°C		20%		

ABSOLUTE MAXIMUM RATINGS

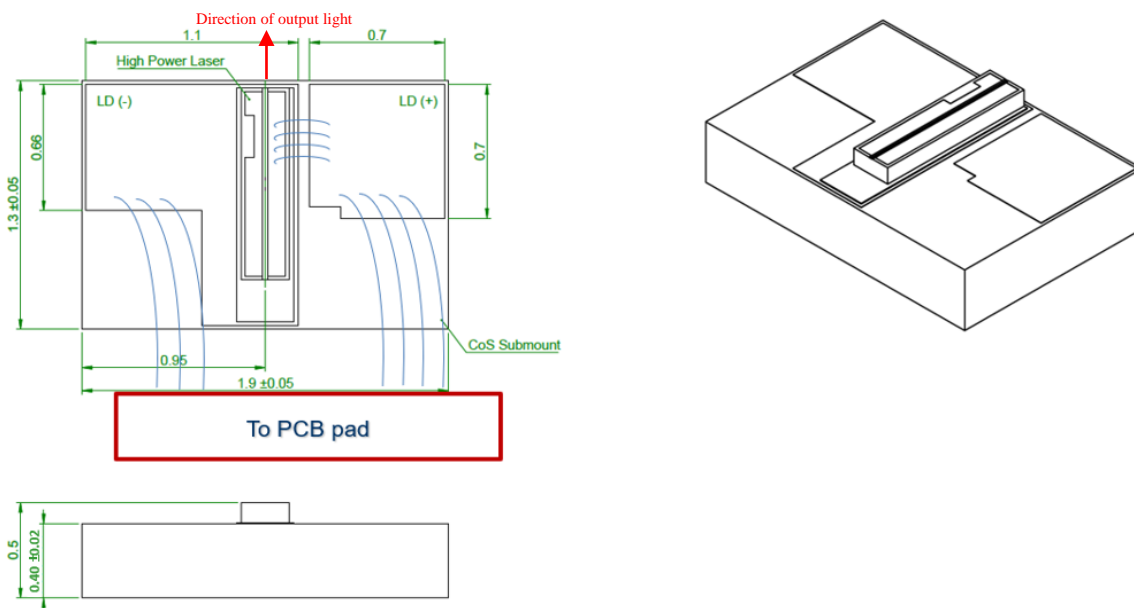
Values should not be exceeded in any conditions to avoid permanent device damage.

ABSOLUTE MAXIMUM RATINGS				
Symbol	Parameter	Min	Max	Unit
V _{RL}	LD Reverse Voltage		2	V
I _f	LD Forward Current		500	mA
P _o	Optical Output Power		100	mW
T _c	Case temperature	0	70	°C
T _{stg}	Storage Temperature	-40	85	°C

RELIABILITY

The chip on carrier is subject to burn-in test before shipping. Reliability performance is in compliance with Telcordia GR-468-CORE, Issue 2 (September 2004), “Generic Reliability Assurance Requirements for Optoelectronic Devices Used in Telecommunications Equipment”.

MECHANICAL DIMENSIONS (mm)



PACKAGE INFORMATION

- ✧ Chip on carrier will be delivered on the Gel-pack.
- ✧ Distance between carrier > 0.2mm

DEVICE HANDLING

- ✧ The chip on carrier is sensitive to electrostatic discharge, which can cause direct or latent damage to laser diodes. Therefore, during assembly, precautions for handling electrostatically sensitive devices must be observed. Both waveguide section and cavity facets should not be touched to avoid any damage.

LASER SAFETY

- ✧ The laser light emitted from the facet of chip is invisible and will be hazardous to the human eye. Avoid looking directly into the facet of chip when the device is in operation.

OPTOWAY TECHNOLOGY INC. No.38, Kuang Fu S. Road, Hu Kou, Hsin Chu Industrial Park, Hsin Chu, Taiwan 303

Tel: 886-3-5979798 Fax:886-3-5979737

e-mail: sales@optoway.com http:// www.optoway.com 5/29/2024 V1.0

REVISION HISTORY

Version	Subject	Release Date
1.0	Initial release	2024/5/29
