

High Power SOA Chip on Carriers



Part Number: COC-288

High Power SOA Chip on Carrier
Single-Mode SOA Curved Waveguide
Wavelength at 1310nm

Features

- High Output Power
- High Dynamic Range
- High Efficiency
- Standard SOA Chip on Carrier
- Cost Effective



Application

- LiDAR
- Optical Communications
- Free Space Communications
- Network Test Equipment



SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary, we will further optimize the design of our InP & GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.

SemiNex Corporation • 153 Andover Street, Suite 201, Danvers, MA 01923 • 978-326-7700 • sales@seminex.com

1 | Page

Individual. Innovative. Exceptional.

Distributed by IMM Photonics GmbH | imm-photonics.de | phone +49 89 321412-57 | sales@imm-photonics.de

High Power SOA Chip on Carriers



Specification

COC-288



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1310	nm
Output Power @1A*	P_{out}	0.45	Watts
Aperture Width	AW	4	μm
3dB Bandwidth	BW	80	nm
Gain @ Pin = 10 μ W	G	35	dB
Beam Exit Angle	θ_{EXT}	19.5	Degree
Noise Figure	NF	6	dB
Polarization Extinction Ratio	PER	18	dB
Fast Axis Div.	$\theta_{\perp}$	30	Deg FWHM
Slow Axis Div.	$\theta_{\parallel}$	16	Deg FWHM
Front Facet Reflectivity		<0.1%	
Rear Face Reflectivity		<0.1%	
Waveguide		Curved	
Electrical	Symbol		Units
Operating Current	I_{op}	1	A
Operating Voltage	V_{op}	2	V
Mechanical		Range	Units
Chip Width		500	μm
Operating Temp.**		-20 to 75	$^{\circ}C$
Storage Temp.		-40 to 85	$^{\circ}C$

*Optical Power for 1310nm Chips CHP-288 and CHP-290 has an SOA current @ 1A and Pin @ 10mW

*Optical Power for 1550nm Chips CHP-285 and CHP-287 has an SOA current @ 1A and Pin @ 36mW

*Specified values are rated at a constant heat sink temperature of 20 $^{\circ}C$.

**High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.

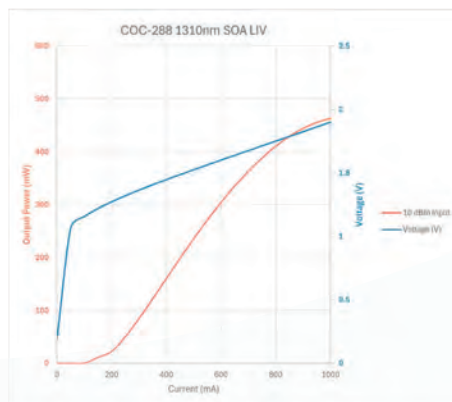
High Power SOA Chip on Carriers



SemiNex SOA COC-288

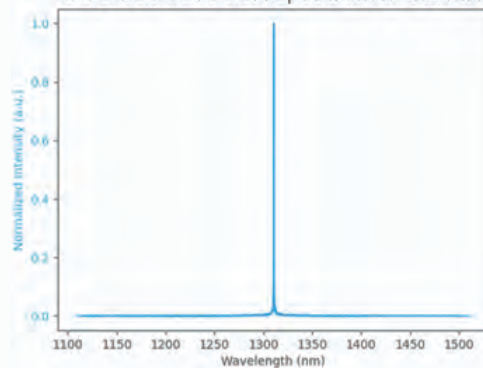
Graphs & Data

Typical COC L-I-V Characteristics



Typical COC Output Spectrum

COC-288 1310 SOA Spectrum at 500mA

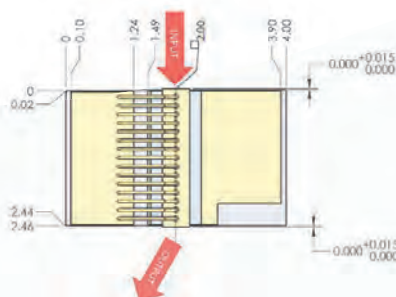
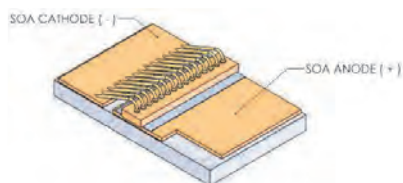


SemiNex Corporation • 153 Andover Street, Suite 201, Danvers, MA 01923 • 978-326-7700 • sales@seminex.com

High Power SOA Chip on Carriers



Mechanical Drawing



All statements, technical information and recommendations related to the product herein are based upon information believed to be reliable or accurate. The accuracy or completeness herein is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. SemiNex Corporation reserves the right to change at any time without notice the design, specification, deduction, fit or form of its described herein, including withdrawal at any time of a product offered for sale herein. Users are encouraged to visit www.seminex.com for the latest data. SemiNex Corporation makes no representations that the products herein are free from any intellectual property claims of others. Please contact SemiNex for more information. ©2024 SemiNex Corporation



SemiNex Corporation • 153 Andover Street, Suite 201, Danvers, MA 01923 • 978-326-7700 • sales@seminex.com