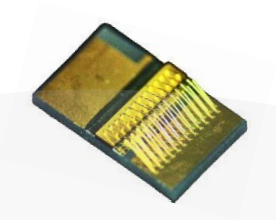
High Power SOA Chip on Carrier

Part Number: COC-285

High Power SOA Chip on Carrier
Single-Mode SOA Curved Waveguide
Wavelength at 1550nm



Features

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

Application

- Optical Communication
- LiDAR
- 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.

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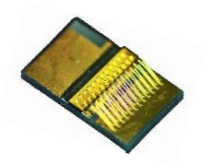
Specification

COC-285



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1550	nm
Output Power @1A*	P_{out}	0.375	watts
Aperture Width	AW	4	µm
Aperture Height	AH	1	µm
Spectral Width	$\Delta\lambda$	85	nm @ 3dB
Gain @ Pin = 10µW	G	32	dB
Beam Exit Angle	θ_{EXT}	19.5	Degree
Noise Figure	NF	7	dB
Polarization Extinction Ratio	PER	18	dB
Fast Axis Div.	$\Theta\perp$	30	deg FWHM
Slow Axis Div.	$\Theta\parallel$	20	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	°C
Storage Temp.		-40 to 85	°C

*Optical Power for 1310nm Chips CHP-288 and CHP-290 has an SOA current @ 1.2A and Pin @ 7mW
*Optical Power for 1550nm Chips CHP-285 and CHP-287 has an SOA current @ 1.4A and Pin @ 36mW

*Specified values are rated at a constant heat sink temperature of 20°C.
**High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.

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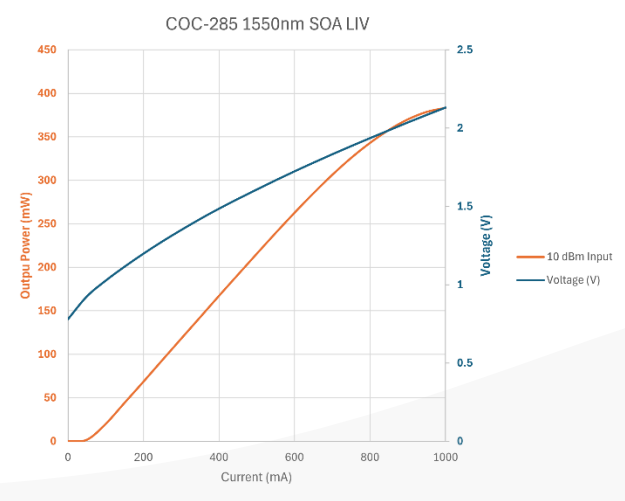
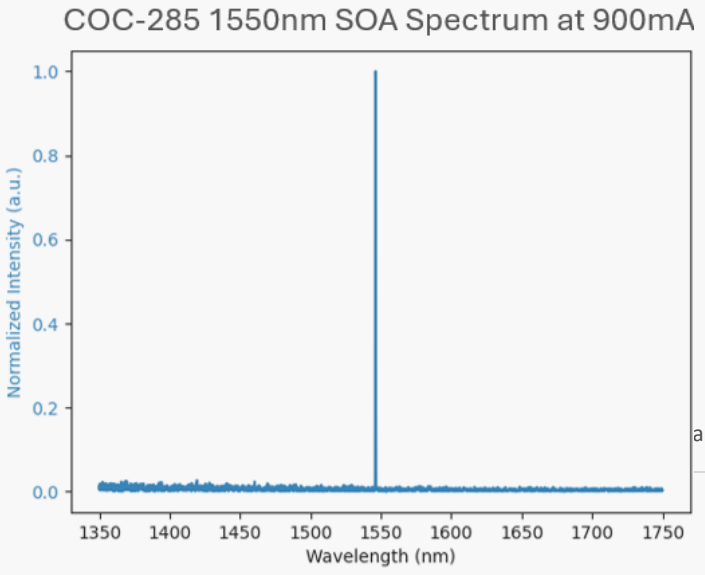
SemiNex SOA COC-285

Graphs & Data

Typical COC L-I-V Characteristics

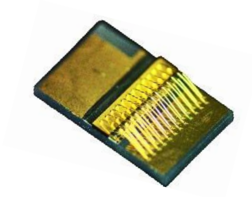


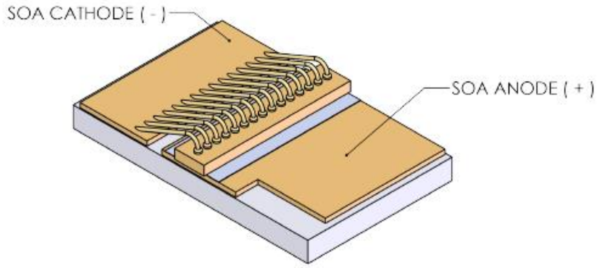
Typical COC Output Spectrum

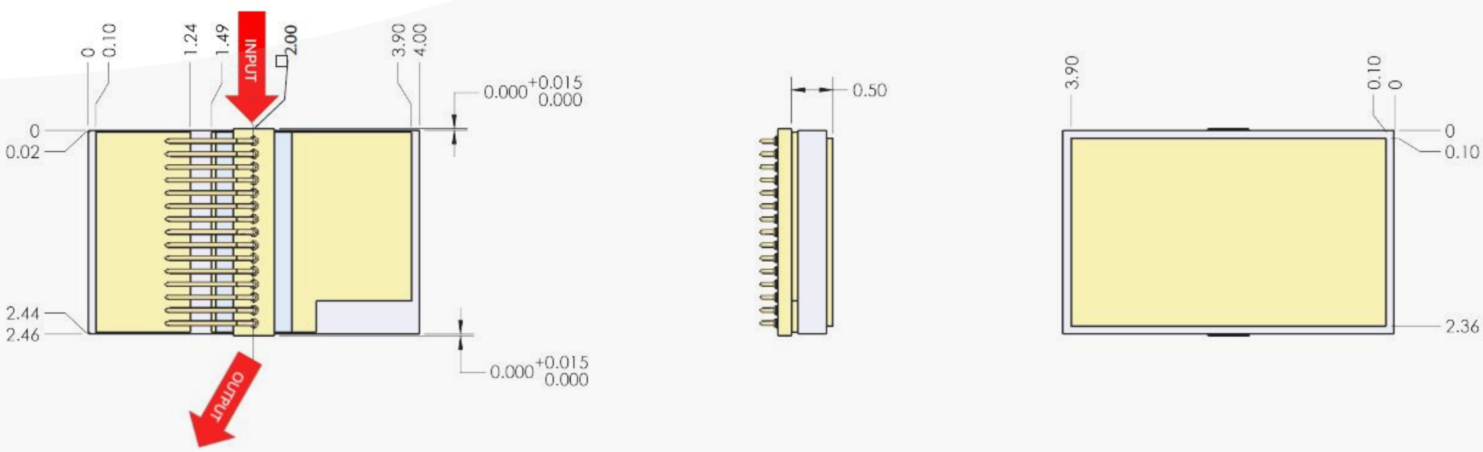


High Power Laser Diode Chip on Carrier

Mechanical Drawing







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