

High Power SOA Chip on Carrier



Part Number: COC-315L

High Power SOA Chip on Carrier
Single-Mode SOA
Wavelength at 1595nm, L-Band



Features

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

Application

- OTDR
- 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-315L



Optical	Symbol	Typ. COC-315L	Units
Center Wavelength	λ_c	1595	nm
Output Power @1A*	P _{out}	0.375	watts
Aperture Width	AW	4	μm
3dB Bandwidth	BW	80	nm
Gain @ Pin = 10 μW	G	32	dB
Gain Bandwidth	BW	80	nm
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		Tilted Straight	
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 1595nm COC-315L with SOA drive current @ 1A and estimated Pin @ 21mW
 * Optical output power depends on the seed laser power, coupling efficiency, and thermal management.

*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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Mechanical Drawing

