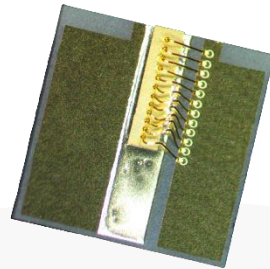


High Power SOA Array Chip on Carrier



Part Number: COC-177

High Power 4-Channel SOA Chip on Carrier
Single-Mode SOA Array
CW Wavelength at 1550nm



Features

- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low-Cost Package

Application

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



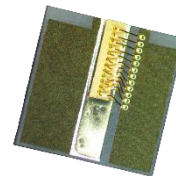
SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary, we will further optimize the design of our InP & GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer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

High Power SOA Array Chip on Carrier



Specification

COC-177



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1550	nm
Output Power @1A per channel*	P_{out}	0.35	Watts
Aperture Width	AW	4	μm
Aperture Height	AH	1	μm
Number of Emitters		4	127 μm pitch
3dB Bandwidth	BW	80	nm
Gain @ Pin = 10 μW	G	35	dB
Beam Exit Angle	θ_{EXT}	19.5	degree
Noise Figure	NF	7	dB
Polarization Extinction Ratio	PER	18	dB
Fast Axis Div.	θ_{\perp}	30	deg FWHM
Slow Axis Div.	θ_{\parallel}	16	deg FWHM
Front Facet Reflectivity		<0.1%	
Rear Face Reflectivity		<0.1%	
Waveguide		Curved	
Electrical	Symbol		Units
Operating Current	I_{op}	2	A
Operating Voltage	V_{op}	1	V
Mechanical		Range	Units
Chip Width		625	μm
Operating Temp.**		-20 to 75	$^{\circ}C$
Storage Temp.		-40 to 85	$^{\circ}C$

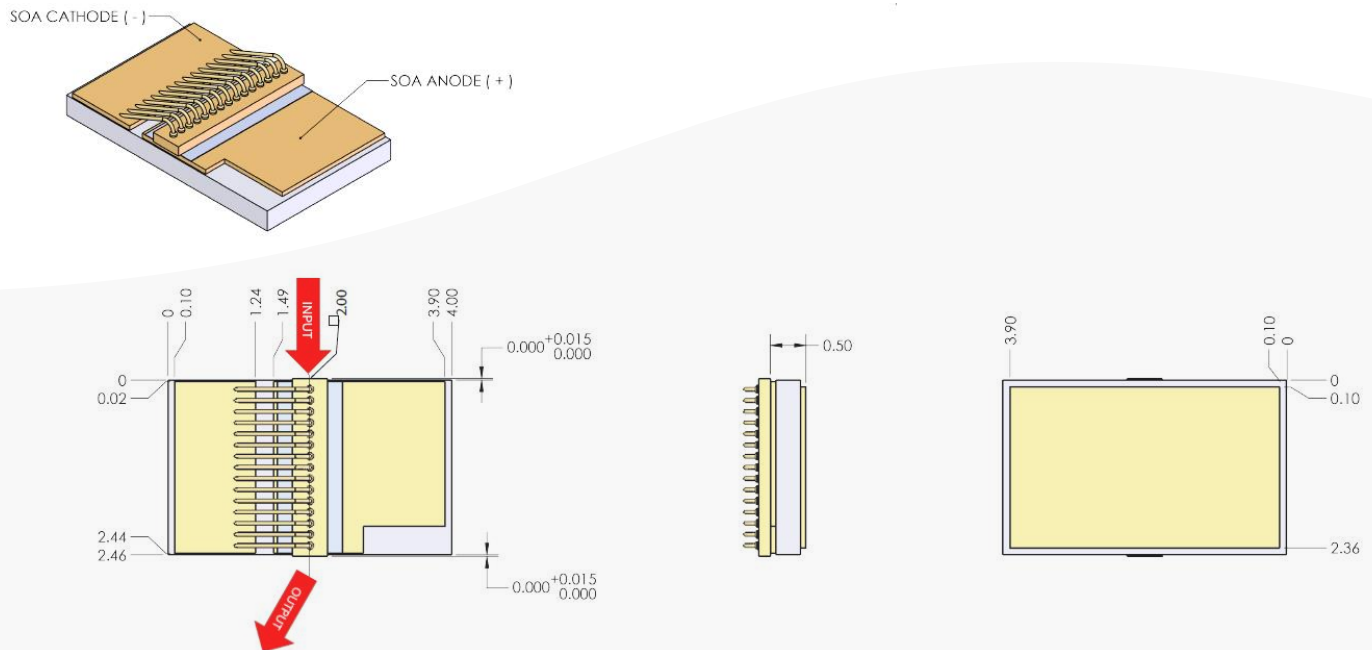
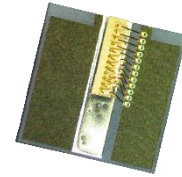
*Specified values are per channel and rated at a constant heat sink temperature of 20 $^{\circ}C$.

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

High Power SOA Array Chip on Carrier



Mechanical Drawing



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