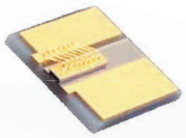
High Power Laser Diode Chip on Carrier

SemiNex CORPORATION

Part Number: COC-240

High Power Chip on Carriers
Multi-Mode Fabry-Perot
Wavelength at 1726nm



Features

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

Application

- Professional Medical
- Home-use Medical

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-240



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1726	nm (±20)
Output Power CW	P_{out}	2.7	watts (±10%)
Emitter Width	W	180	µm
Spectral Width FWHM	$\Delta\lambda$	12	nm
Slope Efficiency	η	0.28	W/A
Fast Axis Div.	$\Theta\perp$	28	deg FWHM
Slow Axis Div.	$\Theta_{\parallel}$	9	deg FWHM
Electrical	**Symbol**		**Units**
Power Conversion Eff.	η	14	%
Operating Current	I_{op}	13	A
Threshold Current	I_{TH}	1.7	A
Operating Voltage	V_{op}	1.6	V
Mechanical		**Range**	**Units**
Operating Temp.**		-40 to 60	°C
Storage Temp.		-40 to 80	°C

*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.

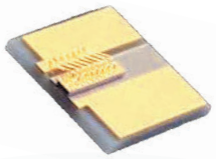
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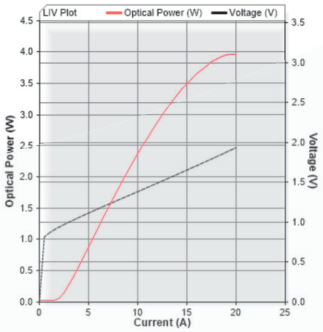
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SemiNex Laser Diodes COC-240

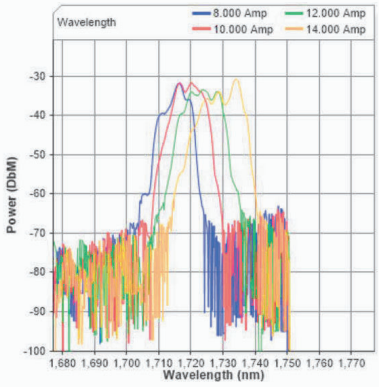


Graphs & Data

Typical COC L-I-V Characteristics



Typical COC Output Spectrum



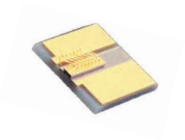
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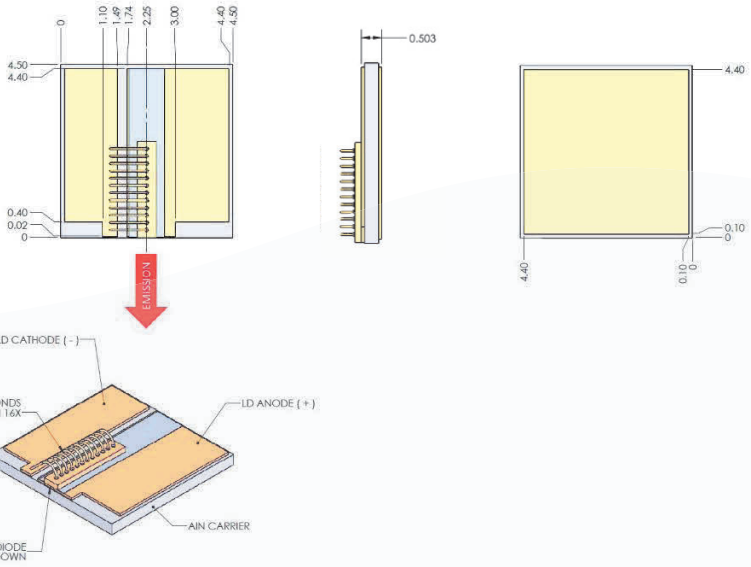
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High Power Laser Diode Chip on Carrier

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Mechanical Drawing





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