

SemiNex delivers the highest available power at infrared wavelengths between 13xx and 17xx nm. When necessary we will further optimize the design of our InP 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

## **C-Mount**

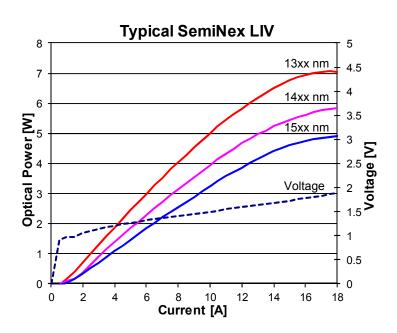
High Power Multi-Mode Lasers Up to 5 watts CW Power 1320, 1475, 1540 and 1560 nm Custom Wavelengths Available

## **Features**

- High Output Power
- High Dynamic power range
- High Efficiency
- Standard Low Cost Mount

## **Applications**

- Medical laser equipment
- LIDAR
- Free Space Communication
- DPSS pump lasers
- Military / Aerospace

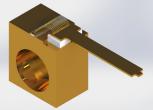


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**C-Mount** 





Slow Axis Divergence    θ_parallel    9    9    9    9    9    deg FWHM      Electrical    Power conversion Efficiency    η    0.27    0.21    0.18    0.18    %      Threshold Current    Ith    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    ohn      Mechanical    Veight    1.4    0    0.0		Symbol	C-124	C-106	C-109	C-116	Units
Output power (CW)  Po  6.2  5  4.2  4.2  watts    Emitter Width  W  95  95  95  95  µm    Emitter Height  H  1  1  1  µm    Spectral Width $\Delta\lambda$ 15  15  15  15  nm 3dB    Slope Efficiency $\eta_0$ 0.5  0.4  0.35  0.35  W/A    Slow Axis Divergence $\theta_perp$ 28  28  28  28  deg FWHM    Slow Axis Divergence $\theta_parallel$ 9  9  9  9  deg FWHM    Slow Axis Divergence $\theta_parallel$ 9  9  9  9  deg FWHM    Slow Axis Divergence $\theta_parallel$ 9  9  9  deg FWHM    Slow Axis Divergence $\theta_parallel$ 9  9  9  deg FWHM    Slow Axis Divergence $\eta_parallel$ 10.18  0.18  0.18  %    Threshold Current  Ith  0.45  0.45  0.45  A    Operating Voltage  Vop  1.8  1.7 <td>Optical</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Optical						
Emitter Width  W  95  95  95  95  μm    Emitter Height  H  1  1  1  1  μm    Spectral Width  Δλ  15  15  15  15  nm 3dB    Slope Efficiency  ηo  0.5  0.4  0.35  0.35  W/A    Fast Axis Divergence  θ_perp  28  28  28  28  deg FWHM    Slow Axis Divergence  θ_parallel  9  9  9  9  9  deg FWHM    Slow Axis Divergence  θ_parallel  9  9  9  9  deg FWHM    Electrical  Power conversion Efficiency  η  0.27  0.21  0.18  0.18  %    Threshold Current  Ith  0.45  0.45  0.45  A    Operating Current  loop  13  14  14  14  A    Operating Voltage  Vop  1.8  1.7  1.7  1.7  V    Storage Temperature  10 to 30  10 to 30  10 to 30  20 to 80  -20 to 80  -20 to 80 <td>Center Wavelength</td> <td>λα</td> <td>1320</td> <td>1480</td> <td>1540</td> <td>1560</td> <td>nm</td>	Center Wavelength	λα	1320	1480	1540	1560	nm
Emitter Height    H    1	Output power (CW)	Po	6.2	5	4.2	4.2	watts
Spectral Width    Δλ    15    15    15    15    nm 3dB      Slope Efficiency    η <sub>0</sub> 0.5    0.4    0.35    0.35    W/A      Fast Axis Divergence    θ_perp    28    28    28    28    deg FWHM      Slow Axis Divergence    θ_parallel    9    9    9    9    deg FWHM      Electrical    Power conversion Efficiency    η    0.27    0.21    0.18    0.18    %      Threshold Current    Ikn    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    0.05    ohn      Mechanical    Veight    1.4    1.4    1.4    1.4    1.4    1.4    1.4    9      Operating Temperature    Specified values are rated at constant heat sink temperat	Emitter Width	W	95	95	95	95	μm
Slope Efficiency    no    0.5    0.4    0.35    0.35    W/A      Fast Axis Divergence    0_perp    28    28    28    28    deg FWHM      Slow Axis Divergence    0_parallel    9    9    9    9    9    9    deg FWHM      Electrical    Power conversion Efficiency    n    0.27    0.21    0.18    0.18    %      Threshold Current    Ith    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    A    A      Operating Voltage    Vop    1.8    1.7    1.7    V    Series Resistance    Rs    0.05    0.05    0.05    ohto 30    °C      Storage Temperature    10 to 30    10 to 30    10 to 30    °C    °C    °C    °C      220    A    -20 to 80    -20 to 80    -20 to 80    °C    °C    °C      220    -20 to 80    -20 to 80    -20 to 80    °C <td< td=""><td>•</td><td>Н</td><td>-</td><td>-</td><td>-</td><td>-</td><td>•</td></td<>	•	Н	-	-	-	-	•
Fast Axis Divergence  θ_perp  28  28  28  28  28  deg FWHM    Slow Axis Divergence  θ_parallel  9	•	Δλ					
Slow Axis Divergence    θ_parallel    9    9    9    9    9    deg FWHM      Electrical    Power conversion Efficiency    η    0.27    0.21    0.18    0.18    %      Threshold Current    Ith    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    ohto 30    °C      Mechanical    Veight    1.4 <td>Slope Efficiency</td> <td>ηο</td> <td>0.5</td> <td>0.4</td> <td>0.35</td> <td>0.35</td> <td>W/A</td>	Slope Efficiency	ηο	0.5	0.4	0.35	0.35	W/A
Electrical      Power conversion Efficiency    η    0.27    0.21    0.18    0.18    %      Threshold Current    Ith    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    ohm      Mechanical    Weight    1.4    1.4    1.4    1.4    1.4    g      Operating Temperature    10 to 30    10 to 30    10 to 30    10 to 30    0 to 30    °C      Storage Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C      Court	Fast Axis Divergence	θ_perp	28	28	28	28	deg FWHM
Power conversion Efficiency    n    0.27    0.21    0.18    0.18    %      Threshold Current    Ith    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    ohm      Mechanical    Meight    1.4    1.4    1.4    1.4    1.4    1.4    g      Operating Temperature    10 to 30    0 to 30    °C      Storage Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C    °C      Operating Temperature    To 30    10 to 30    10 to 30    Oto 30    -20 to 80    -20 to 80    °C    Count      Operating Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C    Count    Count	Slow Axis Divergence	θ_parallel	9	9	9	9	deg FWHM
Power conversion Efficiency    n    0.27    0.21    0.18    0.18    %      Threshold Current    Ith    0.45    0.45    0.45    0.45    A      Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    ohm      Mechanical    Meight    1.4    1.4    1.4    1.4    1.4    1.4    g      Operating Temperature    10 to 30    0 to 30    °C      Storage Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C    °C      Operating Temperature    To 30    10 to 30    10 to 30    Oto 30    -20 to 80    -20 to 80    °C    Count      Operating Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C    Count    Count							
Threshold Current    In    0.45    0.45    0.45    0.45    A      Operating Current    Iop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    ohn      Mechanical    Weight    1.4    1.4    1.4    1.4    1.4    1.4    g      Operating Temperature    10 to 30    °C    °C      Storage Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C    °C      Operating Temperature    -7.52 <td< td=""><td></td><td>n</td><td>0.27</td><td>0.21</td><td>0.18</td><td>0 18</td><td>%</td></td<>		n	0.27	0.21	0.18	0 18	%
Operating Current    lop    13    14    14    14    A      Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    o.05    o.05      Mechanical    Veight    1.4    1.4    1.4    1.4    1.4    1.4    g      Operating Temperature    10 to 30    10 to 30    10 to 30    10 to 30    0 to 30    °C      Storage Temperature    -20 to 80    -20 to 80    -20 to 80    -20 to 80    °C		-					
Operating Voltage    Vop    1.8    1.7    1.7    1.7    V      Series Resistance    Rs    0.05    0.05    0.05    0.05    o.05    ohm      Mechanical    Neight    1.4							
Series Resistance    Rs    0.05    0.05    0.05    0.05    ohm      Mechanical Weight Operating Temperature Storage Temperature    1.4 <th< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td></th<>		-					
Mechanical    Weight  1.4							
Weight Operating Temperature Storage Temperature 2.20 to 80 -20 to 80 -20 to 80 -20 to 80 °C -20 to 80 -20 to 80 -20 to 80 °C -20 to 8	Series Resistance	Ks	0.05	0.05	0.05	0.05	Onm
Operating Temperature  10 to 30  0 to 30  °C    ALL	Mechanical						
Storage Temperature -20 to 80 -20 to 80 -20 to 80 -20 to 80 °C Specified values are rated at constant heat sink temperature of 20° 0.20 4.30 4.30 4.30 4.30 4.30 WIE BONDS COUNT VARIES BASED ON C LENGTH FLYING CATHO	Weight		1.4	1.4	1.4	1.4	
Specified values are rated at constant heat sink temperature of 20° 0.20 7.52 2.79 - 3.18							
2.79 - 3.18 - T	Storage Temperature	a					
2.79 - 3.18	ALL	0.20		values are rate	ed at constant	neat sink tem	perature of 20 C
2.79 VARIES BASED ON C LENGTH - 3.18 - FLYING CATHO			7.				
INSULATING BLOCK	2.79			•	ASER DIE		COUNT VARES BASED ON CA LENGTH FLYING LE CATHODI

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AVOID DIRECT EXPOSURE TO BEAN

CLASS IIIb and IV LASER PRODUCTS product complex with 21 GFR1040 as applicable or aperture is on the lest station. Laser addiation this product is considered an acute hazard to to order one.