

# High Power DFB Laser Diode

## Part Number: COC-316, COC-317

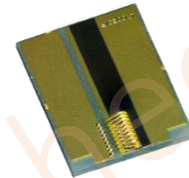
### Features

- High Output Power
- High Efficiency @ 50°C
- 1310nm & CWDM available

### Application

- ELSFP, XPO, CPO
- Optical Communication
- Data Centers
- Direct Detect

## Specification



COC-316, COC-317

Optical	Symbol	COC-316 (typ.)	COC-317 (typ.)	Units
Center Wavelength	$\lambda_c$	1310	1310	nm
Output Power @ $I_{op}$ & 50C	P	>150	>200	mW
Output Power @ $I_{op}$ & 25C	P	200	250	mW
Linewidth	$\delta f$	500	500	kHz
Side Mode Suppression Ratio	SMSR	50	50	dB
Relative Intensity Noise	RIN	-150	-150	dB/Hz
Electrical	Symbol			Units
Power Conversion Eff.	$\eta$	30	25	%
Operating Voltage	$V_{op}$	1.6	1.6	V
Operating Current	$I_{op}$	400	600	mA
Threshold Current	$I_{TH}$	30	30	mA
Mechanical	Symbol			Units
Operating Temp.	°C	-20 to 75	-20 to 75	°C
Storage Temp.	°C	-40 to 85	-40 to 85	°C

\*Specified values are rated at a constant heat sink temperature of 20°C.

\*\*High temperature operation will reduce performance and MTTF.



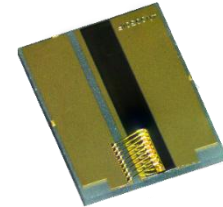
SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary, we will further optimize the design of our InP & GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer 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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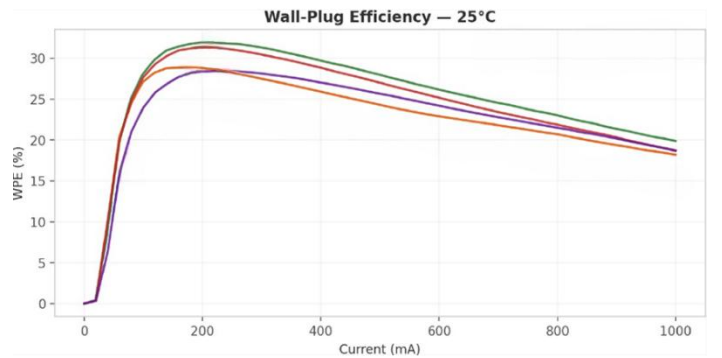
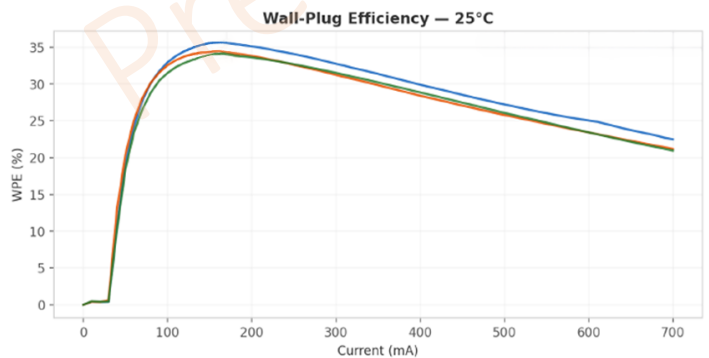
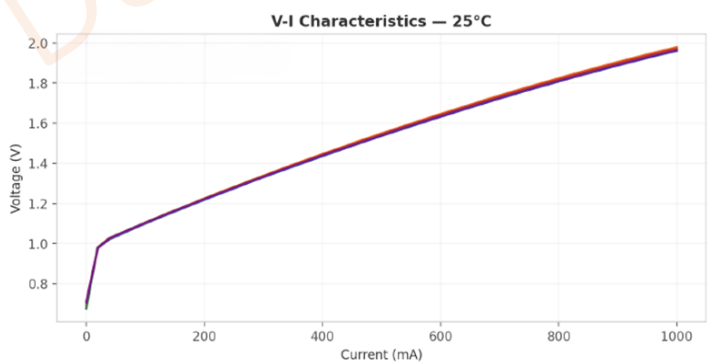
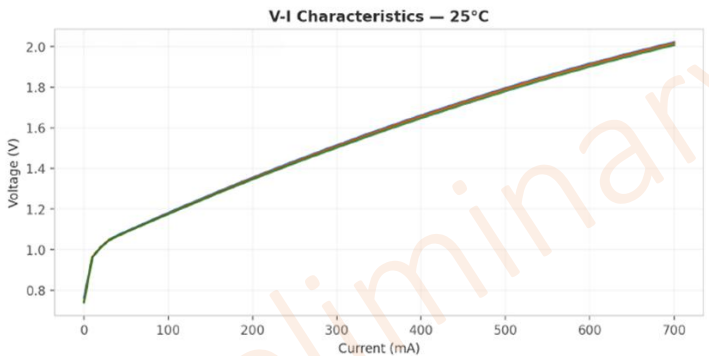
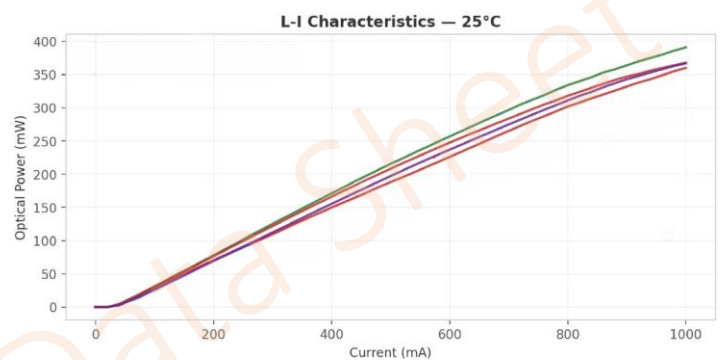
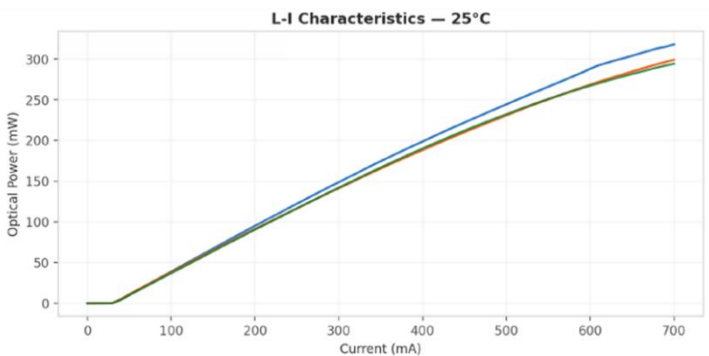
SemiNex Laser Diodes COC-316, COC-317

Graphs & Data: 25°C



Typical DFB COC-316  
L-I-V Characteristics

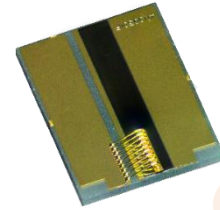
Typical DFB COC-317  
L-I-V Characteristics



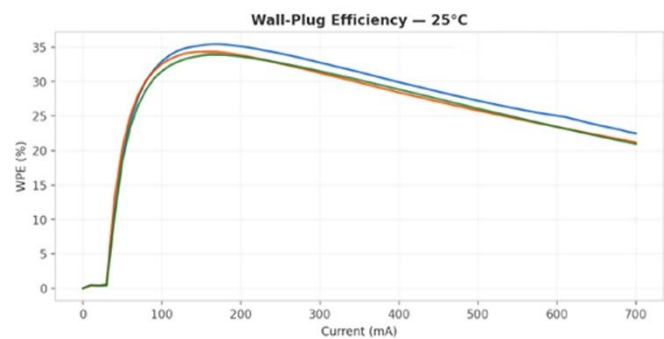
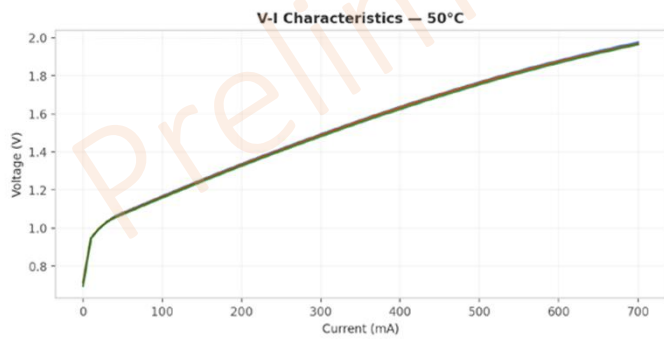
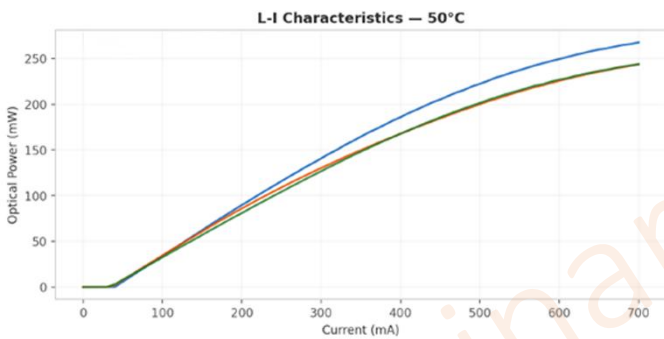
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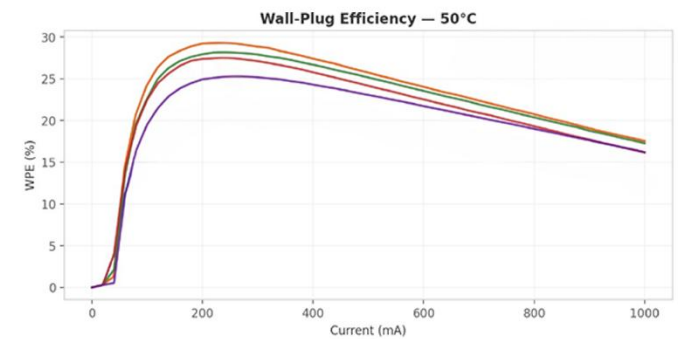
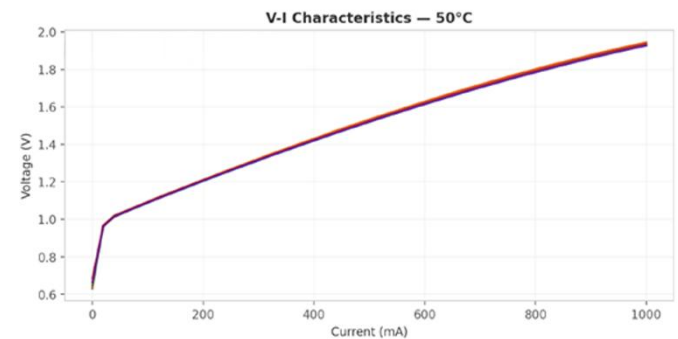
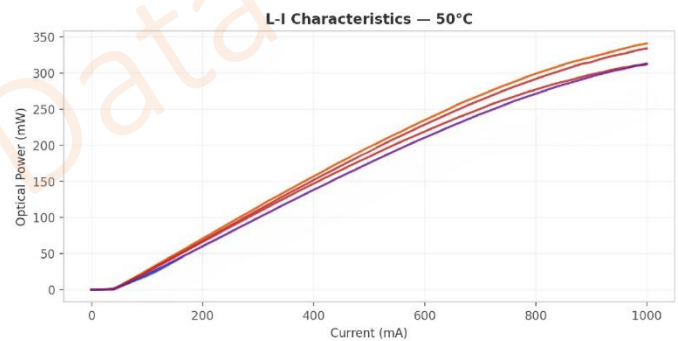
Graphs & Data: 50°C



Typical DFB COC-316  
L-I-V Characteristics



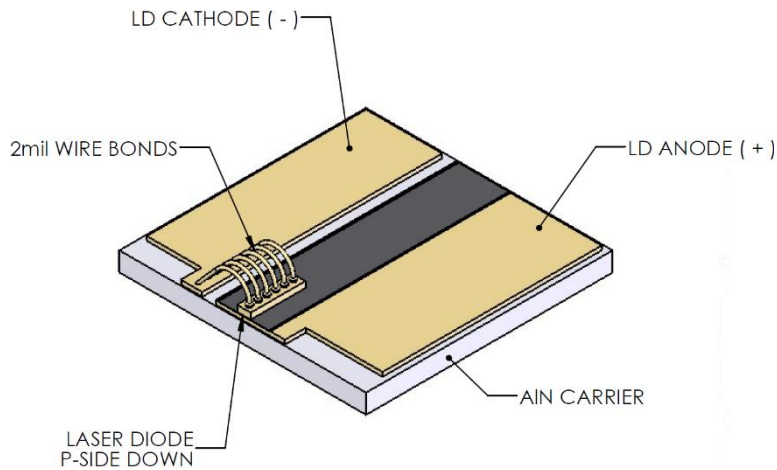
Typical DFB COC-317  
L-I-V Characteristics



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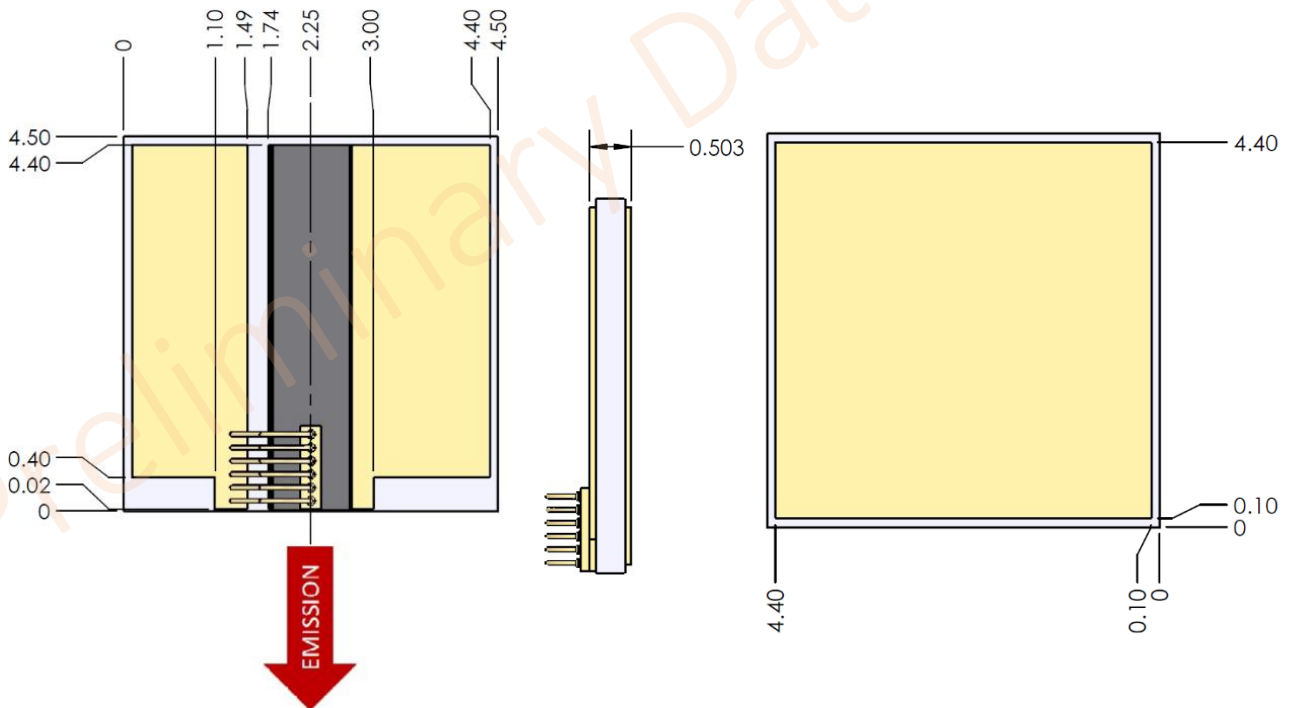
# High Power DFB Laser Diode

## Mechanical Drawing COC-316



UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN  
mm

UNLESS OTHERWISE SPECIFIED  
TOLERANCES ARE  
.X ± 0.25      ANGLES ± .5°  
.XX ± 0.05      SURFACES  
.XXX ± 0.01      0.8 MICRONS



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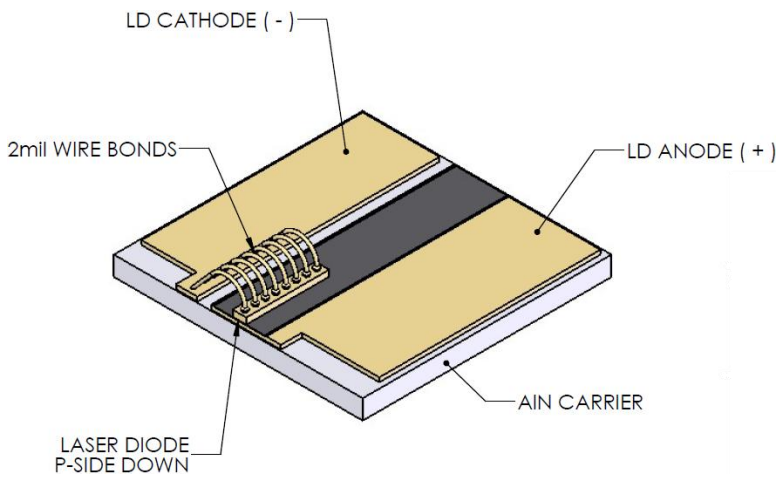
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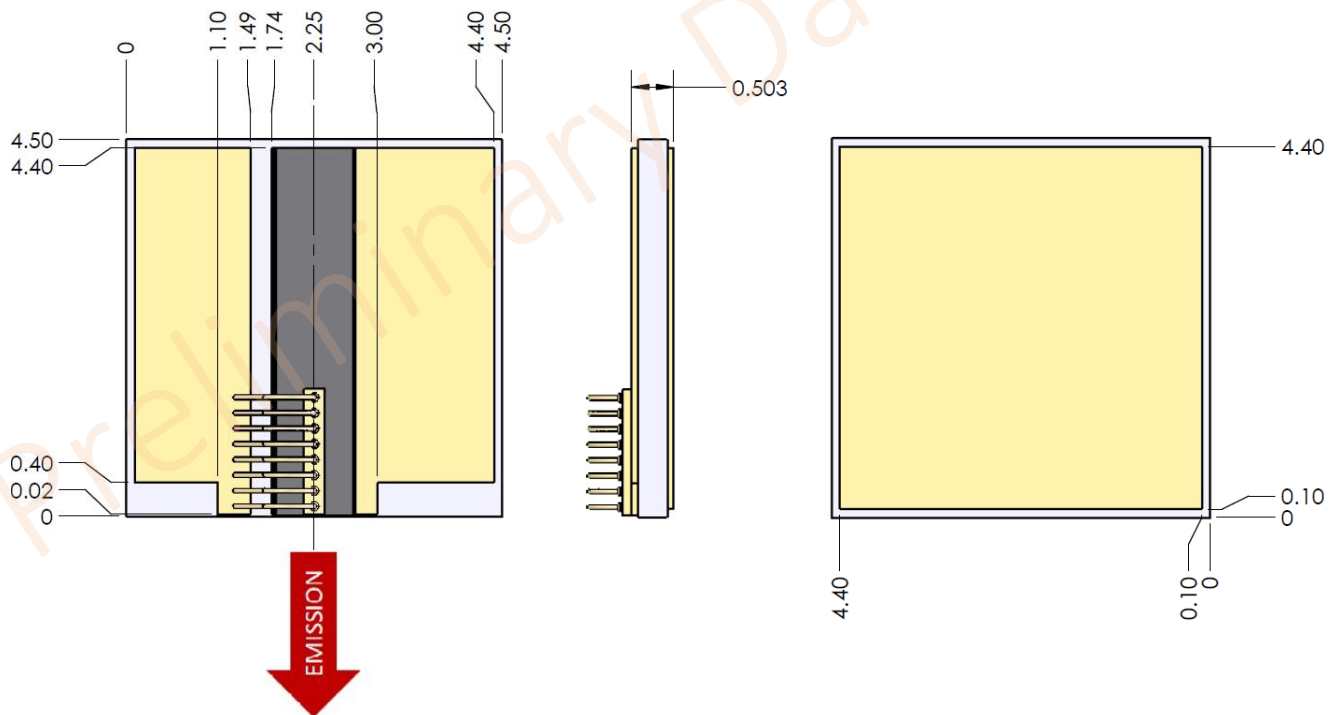
## Mechanical Drawing

COC-317



UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN  
mm

UNLESS OTHERWISE SPECIFIED  
TOLERANCES ARE  
.X ± 0.25      ANGLES ± .5°  
.XX ± 0.05     SURFACES  
.XXX ± 0.01    0.8 MICRONS



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