Chip External-Cavity Laser (CECL)

CECLs are grating-feedback lasers fabricated on a rigid monolithic substrate without any moving parts or piezos. The frequency is tuned via injection current and temperature. The short external cavity increases immunity to vibration and enables mode-hop-free tuning over ~10 GHz, enabling fast, tight locking to cavities or atomic and molecular transitions. CECLs combine the robust nature of DFB/DBR lasers with the low phase noise and center wavelength flexibility of external cavity lasers.

- ***Narrow Linewidth (<100 kHz)***
- ***Vibration Immune: No Moving Parts or Piezos***
- ***Circular Collimated Laser Output***
- ***Large and Fast Mode-Hop-Free Tuning via Injection Current***
- ***Center Wavelength Custom Fixed to Your Specification***

Applications Include:

Atom Trapping & BEC
Seed Lasers
Interferometry

Cavity Enhanced Spectroscopy
Cavity Ring Down (CRD)
Spectroscopic Sensing
Electromagnetically Induced Transparency (EIT)

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	Min.	Typical	Max.	Units
Center Wavelength range (factory set)	760 - 1080 & 1180 - 1610			nm
Center Wavelength Accuracy[1]	± 0.05			nm
Tuning				
Temperature		0.15		nm
Injection Current (mode-hop-free)	3.0	10.0	15.0	GHz
Linewidth	-	50	100	kHz
Output Power[2]	20	40	60	mW
Polarization	Horizontal			
Operating Current	-	-	150	mA

[1] When possible the laser will be shipped on transition.
[2] Output power is wavelength dependent, contact us for details.

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