

# **1.5-1.6 $\mu\text{m}$ VCSEL For Metro WDM Applications**

**C. J. Chang-Hasnain\***

Bandwidth9 Inc., 46410 Fremont Blvd., Fremont, CA 94538; cchang@bw9.com

Abstract: The performance of electrically pumped, continuously tunable, single-epitaxy VCSEL emitting in 1530-1620 nm wavelength regime is reported. The VCSELs exhibit a continuous, repeatable and hysteresis-free wavelength-tuning characteristic. Further, the VCSELs are directly modulated at 2.5 Gbps and has >45 dB side mode suppression ratio (SMSR) over the entire tuning range. The performance of such VCSELs make them highly promising for reconfigurable WDM metropolitan area networks.