

Abstracts

InP-based Gilbert Cell phase detector for generation of stable dense wavelength division multiplexing channel offsets using an optical phase-locked loop

P.G. Goetz, H. Eisele, K.C. Syao, K. Yang and P. Bhattacharya. "InP-based Gilbert Cell phase detector for generation of stable dense wavelength division multiplexing channel offsets using an optical phase-locked loop." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1245-1248.

A Gilbert Cell phase detector for use in an integrated optical phase-locked loop (OPLL) was designed and fabricated using p-i-n/HBT layer structure optimized for photoreceivers. This phase detector was employed in an OPLL designed for producing stable dense wavelength division multiplexing (DWDM) channel offsets. Offsets of 1.4 to over 10 GHz were achieved.

 [Return to main document.](#)