

Microwave Integrated Tunnel Diode Amplifiers for Broadband, High Performance Receivers (1971 [MWSYM])

H.C. Okean and P.J. Meier. "Microwave Integrated Tunnel Diode Amplifiers for Broadband, High Performance Receivers (1971 [MWSYM])." 1971 G-MTT International Microwave Symposium Digest of Technical Papers 71.1 (1971 [MWSYM]): 186-187.

A family of X-band thin-film microstrip tunnel diode amplifiers (TDA's) have been developed for use in broadband, high-performance receivers. These TDA's exhibit half-octave bandwidth capability, with about 9-dB gain per stage over 8.0 to 11.5 GHz, 5.0 to 6.0 dB noise figure (using Ge tunnel diodes), and -14 to -17 dB output level at 1-dB gain compression (using GaAs tunnel diodes). This represents a considerable advance in performance with respect to previously reported MIC - TDA's, shows a two-stage TDA, including an output isolator per stage.

 [Return to main document.](#)