

# Abstracts

## Effective dielectric constant of the embedded transmission line (ETL)-a multilayer stripline-like structure

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*A. Darwish, A. Ezzeddine, H.C. Huang and M. Mah. "Effective dielectric constant of the embedded transmission line (ETL)-a multilayer stripline-like structure." 1999 MTT-S International Microwave Symposium Digest 99.3 (1999 Vol. III [MWSYM]): 1249-1252 vol.3.*

Utilizing 3D circuits may reduce components cost significantly. An essential configuration to consider is the embedded transmission line (ETL), an offset stripline with two dielectrics. There is no closed-form solution for the effective dielectric constant. This paper provides an accurate (1% maximum error) approximate formula, and compares it with full wave simulations.

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