

# Abstracts

## Impedance Transforming 3-dB 90° Hybrids (1987 Vol. I [MWSYM])

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*R. Gupta, S. Anderson and W. Getsingert. "Impedance Transforming 3-dB 90° Hybrids (1987 Vol. I [MWSYM])." 1987 MTT-S International Microwave Symposium Digest 87.1 (1987 Vol. I [MWSYM]): 203-206.*

Design techniques and performance results for impedance transforming 3-dB 90° hybrids are presented. A broadband hybrid with 50- to 20- $\Omega$  impedance transformation has been realized by tandem connection of coupled-line sections. Measured results show an amplitude balance of  $3.7 \pm 0.68$  dB and return loss and isolation of approximately 15 dB over the 3- to 5-GHz range. Test results for a 50- $\Omega$  tandem hybrid and a 50- to 25- $\Omega$  branch-line hybrid are also presented.

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