Abstracts

Wafer Probe Transducer Efficiency

D.F. Williams, R.B. Marks, D.K. Walker and F.R. Clague. "Wafer Probe Transducer Efficiency." 1992 Microwave and Guided Wave Letters 2.10 (Oct. 1992 [MGWL]): 388-390.

Experimental evidence is presented that shows the conventional expression relating the transducer efficiency of a two-port to measured scattering parameters is incorrect when the characteristic impedance at one of the ports is complex. This evidence is based on the measurement of the power from a microwave source transferred through a probe to a lossy coplanar waveguide. The conventional expression differs from the measurement by up to 20%. An alternative expression, accounting for the complex characteristic impedance, gives accurate results.

❑ Return to main document.