

Vector Network Analysis in Printed Transmission Lines

Discovery Through Measurement

Advances in microwave wafer probes and vector network analyzers have opened up a whole new world of discovery in microwave metrology, making possible accurate on-wafer measurements in printed transmission lines at microwave, millimeter-wave, sub-millimeter-wave, and even terahertz frequencies. I will trace the history of on-wafer measurements, discuss the fundamental principles behind accurate on-wafer measurements, touch on important applications in transistor, device, and waveform measurement, and preview the bright future of a field that continues to grow in importance in electrical engineering.