Record Nr. UNINA9910299827103321 Autore **Hrobak Michael** Titolo Critical mm-Wave Components for Synthetic Automatic Test Systems / / by Michael Hrobak Pubbl/distr/stampa Wiesbaden:,: Springer Fachmedien Wiesbaden:,: Imprint: Springer Vieweg, , 2015 **ISBN** 3-658-09763-9 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (449 p.) Collana Research 620 Disciplina 621.3 621.381 Soggetti Microwaves Optical engineering Electronics Microelectronics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Synthetic Instruments.- Resistive Diode Frequency Multipliers -- Planar Directional Couplers and Filters.- Triple Balanced Mixers -- Zero Bias Schottky Power Detectors.- Integrated Front End Assemblies. - Summary .- Zusammenfassung. Sommario/riassunto Michael Hrobak studied hybrid integrated front end modules for high frequency measurement equipment and especially for synthetic automatic test systems. Recent developments of innovative, critical millimeter-wave components like frequency multipliers, directional couplers, filters, triple balanced mixers and power detectors are illustrated by the author separately and in combination. Contents Synthetic Instruments Resistive Diode Frequency Multipliers Planar Directional Couplers and Filters Triple Balanced Mixers Zero Bias Schottky Power Detectors Integrated Front End Assemblies Target Groups Scientists and students in the field of electrical engineering with main emphasis on high frequency technology Engineers and Practitioners dealing with the development of micro- and millimeter-

wave measurement instruments. About the Author Dr. Michael Hrobak.

is with the Microwave Department of the Ferdinand-Braun-Institut (FBH), Berlin, Germany, where he is involved in the development and measurement of monolithic integrated circuits using indium phosphide (InP) double heterojunction bipolar transistors (DHBT). His research interests are in the field of planar realizations of linear and nonlinear broadband components, including directional couplers and filters, balanced mixers, frequency multipliers and power detectors.