1. Record Nr. UNINA9910973255503321 Autore Andrews David (Electrical engineer) Titolo Lumped element quadrature hybrids / / David Andrews Pubbl/distr/stampa Boston, : Artech House, c2006 **ISBN** 1-58053-602-6 Edizione [1st ed.] Descrizione fisica 1 online resource (230 p.) Artech House microwave library Collana Disciplina 621.381/32 Soggetti Lumped elements (Electronics) Microwave integrated circuits Radio frequency integrated circuits Curves - Rectification and quadrature 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 and index. Nota di contenuto Lumped Element Quadrature Hybrids: Contents: Preface ix: 1 Overview of Quadrature Hybrids 1; 2 Basic Theory 19; 3 Approximations 35; 4 Passive Synthesis 75; 5 Practical Design 129; 6 Special Topics 169; Glossary 203; Bibliography 207; About the Author 211; Index 213 Sommario/riassunto Annotation Quadrature hybrids are passive circuit elements that are used in a wide range of RF and microwave applications, and this cutting-edge book is the first resource to provide engineers with a solid understanding of their characteristics and design. The book helps professionals use lumped element quadrature hybrids to achieve extremely wide bandwidth operation. This hands-on volume provides detailed construction techniques with worked examples, and describes the synthesis of circuits using practical circuit topologies. Moreover, the book discusses a wide-range of related topics, including active circuits, weak couplers, non-quadrature dividers, and tips on using

graphical techniques. This comprehensive reference is thoroughly supported with over 225 illustrations and more than 200 equations.