1. Record Nr. UNINA9910465188403321 Autore Linkhart Douglas K. Titolo Microwave circulator design / / Douglas K. Linkhart Pubbl/distr/stampa Norwood, Massachusetts:,: Artech House,, [2014] [Piscatagay, New Jersey]:,: IEEE Xplore,, [2014] **ISBN** 1-60807-584-2 Edizione [Second edition.] Descrizione fisica 1 online resource (386 p.) Collana Artech House microwave library Disciplina 621.381/331 Circulators, Wave-guide - Design and construction Soggetti Electronic books. 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 at the end of each chapters and index. Nota di contenuto Microwave Circulator DesignSecond Edition; Contents; Preface; Acknowledgments; 1 Theory of Operation; 1.1 Units, Conversions, and Symbols; 1.2 The Physical Basis of Ferrimagnetism; 1.3 Ferrimagnetic Resonance; 1.4 Microwave Propagation in Ferrites; 1.5 Other Technologies; 1.5.1 Semiconductor Circulators; 1.5.2 Nanotechnology Circulators: 1.5.3 Thin Ferrite Films: 1.5.4 Active Circulators: References; 2 Circulator Specification; 2.1 The Parameters; 2.2 Reflections and Segmentation; 2.3 Junction Circulators; 2.3.1 Single-Ferrite (Non- Composite) Junction Circulators. 2.3.2 Composite- Ferrite Junction Circulators 2.4 Lumped- Constant Circulators; 2.5 Differential Phase Shift Circulators; 2.6 Switching Circulators; 2.7 Okada Circulators; 2.8 Field- Displacement Isolators; 2.9 Resonance Isolators; References; 3 Applications of Circulators; 3.1 Load Isolation; 3.2 Duplexing; 3.3 Multiplexing; 3.4 Parametric Amplifiers: 3.5. "Circulator design has advanced significantly since the first edition of Sommario/riassunto this book was published 25 years ago. The objective of this second edition is to present theory, information, and design procedures that will enable microwave engineers and technicians to design and build circulators successfully. This resource contains a discussion of the various units used in the circulator design computations, as well as

covers the theory of operation. This book presents numerous

applications, giving microwave engineers new ideas about how to solve
problems using circulators. Design examples are provided, which
demonstrate how to apply the information to real-world design tasks."