

The book was found

The IGBT Device: Physics, Design And Applications Of The Insulated Gate Bipolar Transistor



Synopsis

The IGBT device has proved to be a highly important Power Semiconductor, providing the basis for adjustable speed motor drives (used in air conditioning and refrigeration and railway locomotives), electronic ignition systems for gasoline-powered motor vehicles and energy-saving compact fluorescent light bulbs. Recent applications include plasma displays (flat-screen TVs) and electric power transmission systems, alternative energy systems and energy storage. This book is the first available to cover the applications of the IGBT, and provide the essential information needed by applications engineers to design new products using the device, in sectors including consumer, industrial, lighting, transportation, medical and renewable energy. The author, B. Jayant Baliga, invented the IGBT in 1980 while working for GE. His book will unlock IGBT for a new generation of engineering applications, making it essential reading for a wide audience of electrical engineers and design engineers, as well as an important publication for semiconductor specialists. Essential design information for applications engineers utilizing IGBTs in the consumer, industrial, lighting, transportation, medical and renewable energy sectors. Readers will learn the methodology for the design of IGBT chips including edge terminations, cell topologies, gate layouts, and integrated current sensors. The first book to cover applications of the IGBT, a device manufactured around the world by more than a dozen companies with sales exceeding \$5 Billion; written by the inventor of the device.

Book Information

Hardcover: 732 pages

Publisher: William Andrew; 1 edition (April 1, 2015)

Language: English

ISBN-10: 1455731439

ISBN-13: 978-1455731435

Product Dimensions: 9.3 x 2 x 7.7 inches

Shipping Weight: 3.6 pounds (View shipping rates and policies)

Average Customer Review: 2.0 out of 5 stars See all reviews (1 customer review)

Best Sellers Rank: #671,131 in Books (See Top 100 in Books) #28 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Transistors #196 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics #201 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits > Design

Customer Reviews

The first part of the book about the IGBT physics is okay, but the second part of the book about application could have been better. It should have been put more effort in the chapter about gate drive and gate drive circuits. I also miss detailed discussion about snubber circuits. The price does not reflect the contents of the book.

[Download to continue reading...](#)

The IGBT Device: Physics, Design and Applications of the Insulated Gate Bipolar Transistor Bipolar Happens! 35 Tips and Tricks to Manage Bipolar Disorder Break the Bipolar Cycle: A Day-by-Day Guide to Living with Bipolar Disorder Facing Bipolar: The Young Adult's Guide to Dealing with Bipolar Disorder BIPOLAR DISORDER: Bipolar Disorder Survival Guide (SECOND EDITION) Gas Insulated Substations (Wiley - IEEE) Chromecast: Chromecast Easy Guide: Master Your Chromecast Device and Enjoy TV Entertainment With Low-Cost Media Streamer (Chromecast, Chromecast User Guide, Chromecast books, Chromecast Device) How to Add A Device To My Account: How to Add a Device Interdisciplinary Interaction Design: A Visual Guide to Basic Theories, Models and Ideas for Thinking and Designing for Interactive Web Design and Digital Device Experiences The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Principles of Transistor Circuits, Eighth Edition: Introduction and guide to the design of amplifiers, function generators, receivers and digital circuits Field-Effect Transistor Amp Analysis and Design Microwave Transistor Amplifiers: Analysis and Design (2nd Edition) Practical Guide to Organic Field-Effect Transistor Circuit Design Introductory Semiconductor Device Physics Handbook of Human Factors in Medical Device Design Design Controls for the Medical Device Industry Operation and Modeling of the MOS Transistor (The Oxford Series in Electrical and Computer Engineering) Operation and Modeling of the MOS Transistor: Special MOOC Edition (The Oxford Series in Electrical and Computer Engineering) Transistor Radios: A Collector's Encyclopedia and Price Guide

[Dmca](#)