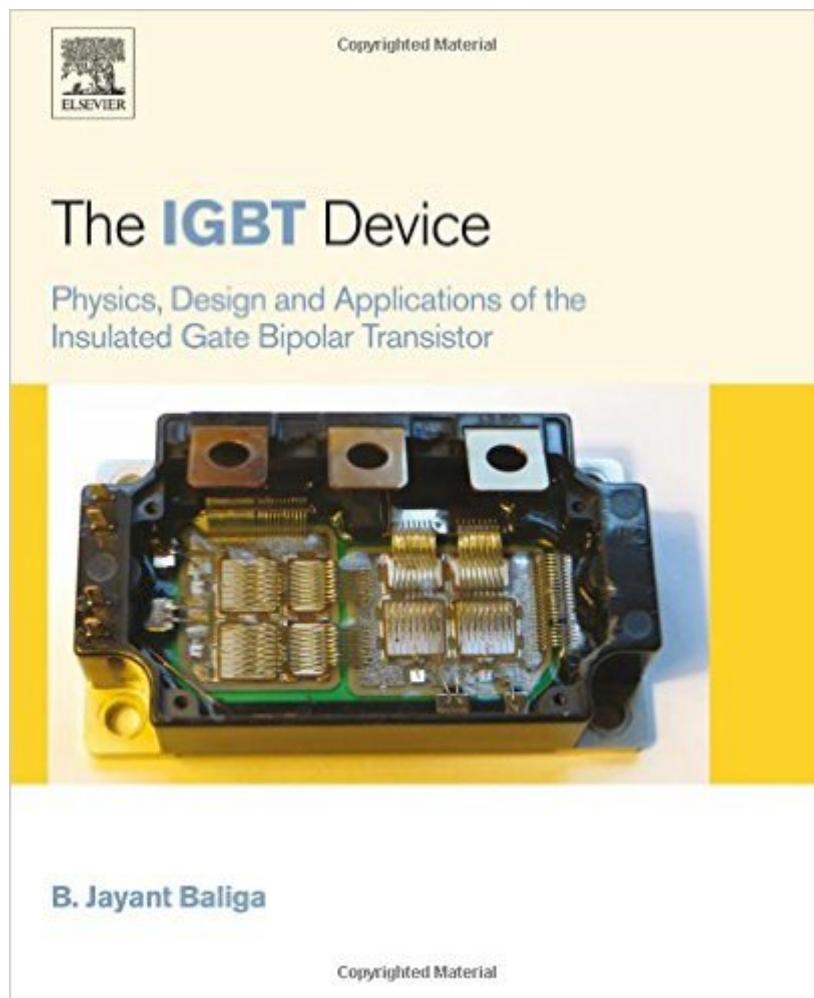


The book was found

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)

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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.

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