

PHOTOVOLTAIC SOLAR CELL LIKE RECEIVER FOR ELECTROMAGNETIC WAVES IN VHF-UHF BANDS

Daniel Iulian COSTIA, Mihai Octavian POPESCU, Claudia Laurența POPESCU
Aurelian CRACIUNESCU

Electrical Engineering Faculty
University POLITEHNICA of Bucharest
313 Independentei 060042 Bucharest Romania tel/fax + 040 213181003
mo_popescu@rektorat.pub.ro ; claudia.popescu@upb.ro

Abstract

This paper describes the photovoltaic solar cell like receiver for electromagnetic waves in VHF-UHF bands and the application of photovoltaic solar cell in planar antenna structures. The radiating patch element of a planar antenna is replaced by a solar cell. Furthermore radiating slots are built due to the cell spacing in a solar cell array. The original feature of a solar cell (DC current generation) remains, but additionally the solar cell is now able to receive and transmit electromagnetic waves, because the electromagnetic radiation is an important source of interference on the useful signals in the electric and electromagnetic devices.

Key words : solar cells,
electromagnetic waves, antenna,
measurements, receiver.

1. Introduction

A sustainable development is conditioned by preserving the environment quality, by the study and diminishing of the polluting effects. A special polluting environment category is the electromagnetic pollution which has an impact both on the aparata and on the electric/electromagnetic devices and on plants and living organisms.

An electric or electronic device is submitted to an electromagnetic aggression by the sources of perturbations from the environment and the way this works can be more or less affected. On the other hand the electric device produces itself perturbations which affect other devices and electric aparata. The perturbation is an electromagnetic phenomenon which can

deteriorate the performance of a device or can affect in a disadvantageous way the living (substance). The electromagnetic interference (EMI – ElectroMagnetic Interference) is the result of a perturbation on an electric device. The Electromagnetic Compatibility (EMC) is the capacity of a electric system to work correctly in its electromagnetic field/environment without producing in its turn perturbations on other devices in this environment. The immunity of a device is the capacity to work accordingly in the presence of a perturbation. The susceptibility represents the loss of immunity.

The electromagnetic radiation is an important source of interference on the useful signals in the electric and electromagnetic devices. The sources of electromagnetic radiation are:

- fix radio broadcasting stations, tv, radar;
- mobile broadcasting stations used in telecommunications and the technological processes;
- energetic equipments where commutation is made with or without electric bow;
- atmospheric phenomena.

In CEM technique, the electromagnetic radiation is important from two points of view:

1. **Immunity.** It is necessary that an electric or electromagnetic device to work in good conditions in the presence of an electric field established by standards (CEI 801). For this purpose in the laboratory electromagnetic radiations are generated having a wide range of frequency (9 kHz...1 GHz) and the amplitude of an electric field is established to which the equipment still work.

Photovoltaic Solar Cell Like Receiver For Electromagnetic

Mark Steyvers



Photovoltaic Solar Cell Like Receiver For Electromagnetic:

Immerse yourself in the artistry of words with Experience Art with its expressive creation, Discover the Artistry of **Photovoltaic Solar Cell Like Receiver For Electromagnetic** . This ebook, presented in a PDF format (PDF Size: *), is a masterpiece that goes beyond conventional storytelling. Indulge your senses in prose, poetry, and knowledge. Download now to let the beauty of literature and artistry envelop your mind in a unique and expressive way.

<https://db1.greenfirefarms.com/book/browse/default.aspx/keystone%20building%20solutions%20pty%20ltd.pdf>

Table of Contents Photovoltaic Solar Cell Like Receiver For Electromagnetic

1. Understanding the eBook Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - The Rise of Digital Reading Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Advantages of eBooks Over Traditional Books
2. Identifying Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - User-Friendly Interface
4. Exploring eBook Recommendations from Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Personalized Recommendations
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic User Reviews and Ratings
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic and Bestseller Lists
5. Accessing Photovoltaic Solar Cell Like Receiver For Electromagnetic Free and Paid eBooks
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic Public Domain eBooks
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic eBook Subscription Services
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic Budget-Friendly Options

6. Navigating Photovoltaic Solar Cell Like Receiver For Electromagnetic eBook Formats
 - ePub, PDF, MOBI, and More
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic Compatibility with Devices
 - Photovoltaic Solar Cell Like Receiver For Electromagnetic Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Highlighting and Note-Taking Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Interactive Elements Photovoltaic Solar Cell Like Receiver For Electromagnetic
8. Staying Engaged with Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Photovoltaic Solar Cell Like Receiver For Electromagnetic
9. Balancing eBooks and Physical Books Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Photovoltaic Solar Cell Like Receiver For Electromagnetic
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Setting Reading Goals Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Fact-Checking eBook Content of Photovoltaic Solar Cell Like Receiver For Electromagnetic
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
 - Integration of Multimedia Elements

- Interactive and Gamified eBooks

Photovoltaic Solar Cell Like Receiver For Electromagnetic Introduction

Free PDF Books and Manuals for Download: Unlocking Knowledge at Your Fingertips In today's fast-paced digital age, obtaining valuable knowledge has become easier than ever. Thanks to the internet, a vast array of books and manuals are now available for free download in PDF format. Whether you are a student, professional, or simply an avid reader, this treasure trove of downloadable resources offers a wealth of information, conveniently accessible anytime, anywhere. The advent of online libraries and platforms dedicated to sharing knowledge has revolutionized the way we consume information. No longer confined to physical libraries or bookstores, readers can now access an extensive collection of digital books and manuals with just a few clicks. These resources, available in PDF, Microsoft Word, and PowerPoint formats, cater to a wide range of interests, including literature, technology, science, history, and much more. One notable platform where you can explore and download free Photovoltaic Solar Cell Like Receiver For Electromagnetic PDF books and manuals is the internet's largest free library. Hosted online, this catalog compiles a vast assortment of documents, making it a veritable goldmine of knowledge. With its easy-to-use website interface and customizable PDF generator, this platform offers a user-friendly experience, allowing individuals to effortlessly navigate and access the information they seek. The availability of free PDF books and manuals on this platform demonstrates its commitment to democratizing education and empowering individuals with the tools needed to succeed in their chosen fields. It allows anyone, regardless of their background or financial limitations, to expand their horizons and gain insights from experts in various disciplines. One of the most significant advantages of downloading PDF books and manuals lies in their portability. Unlike physical copies, digital books can be stored and carried on a single device, such as a tablet or smartphone, saving valuable space and weight. This convenience makes it possible for readers to have their entire library at their fingertips, whether they are commuting, traveling, or simply enjoying a lazy afternoon at home. Additionally, digital files are easily searchable, enabling readers to locate specific information within seconds. With a few keystrokes, users can search for keywords, topics, or phrases, making research and finding relevant information a breeze. This efficiency saves time and effort, streamlining the learning process and allowing individuals to focus on extracting the information they need. Furthermore, the availability of free PDF books and manuals fosters a culture of continuous learning. By removing financial barriers, more people can access educational resources and pursue lifelong learning, contributing to personal growth and professional development. This democratization of knowledge promotes intellectual curiosity and empowers individuals to become lifelong learners, promoting progress and innovation in various fields. It is worth noting that while accessing free Photovoltaic Solar Cell Like Receiver For Electromagnetic PDF books and manuals is convenient and cost-effective, it is vital to respect copyright laws and intellectual property rights.

Platforms offering free downloads often operate within legal boundaries, ensuring that the materials they provide are either in the public domain or authorized for distribution. By adhering to copyright laws, users can enjoy the benefits of free access to knowledge while supporting the authors and publishers who make these resources available. In conclusion, the availability of Photovoltaic Solar Cell Like Receiver For Electromagnetic free PDF books and manuals for download has revolutionized the way we access and consume knowledge. With just a few clicks, individuals can explore a vast collection of resources across different disciplines, all free of charge. This accessibility empowers individuals to become lifelong learners, contributing to personal growth, professional development, and the advancement of society as a whole. So why not unlock a world of knowledge today? Start exploring the vast sea of free PDF books and manuals waiting to be discovered right at your fingertips.

FAQs About Photovoltaic Solar Cell Like Receiver For Electromagnetic Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Photovoltaic Solar Cell Like Receiver For Electromagnetic is one of the best book in our library for free trial. We provide copy of Photovoltaic Solar Cell Like Receiver For Electromagnetic in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Photovoltaic Solar Cell Like Receiver For Electromagnetic. Where to download Photovoltaic Solar Cell Like Receiver For Electromagnetic online for free? Are you looking for Photovoltaic Solar Cell Like Receiver For Electromagnetic PDF? This is definitely going to save you time and cash in something you should think about.

Find Photovoltaic Solar Cell Like Receiver For Electromagnetic :

keystone building solutions pty ltd

kamus musik

la linea ann jaramillo kapitelzusammenfassung

la fonction rssi guide des pratiques et retours dexpeacuterience e eacutedition guide des pratiques et retours dexpeacuterience

jouer jeux ps2 sur ps3 multiman

koraps korea auto parts service hyundai kia gm

kertas soalan peperiksaan percubaan sains pt3 2017 science

key answers upstream student intermediate b2

kambikuttan kadha

julius caesar question and answer key

la economia long tail spanish edition

kreitner kinicki organizational behavior 9th edition

lancer 90 engine ecu wiring diagram

jumanji 2017 hindi dubbed dvdrip hd mp4 avi movie

kieso weygandt warfield 15th edition chinavpnore

Photovoltaic Solar Cell Like Receiver For Electromagnetic :

Psicología: Ideología y ciencia (Spanish Edition) Psicología: ideología y ciencia, un título para sugerir que la psicología es campo de batalla; toma de partido en un combate que no podrá zanjarse mediante ... psicología: ideología y ciencia Sabíamos ya que la psicología estaba ideologizada pero el nuestro era un saber no organizado. Psicología: ideología y ciencia aclara confusiones y dudas de. psicología: ideología y ciencia CÓMO SE CONSTITUYE UNA CIENCIA? 11 aceptamos que la ciencia es ciencia de una ideología a la que crítica y explica, no puede ser menos cierto que para que ... Psicología: ideología y ciencia Nov 12, 2022 — Psicología: ideología y ciencia · Idioma Español · Fecha de publicación 2000 · ISBN 9789682317323. Psicología: Ideología y ciencia - Marcelo Pasternac, Gloria ... May 28, 2003 — Psicología: ideología y ciencia, un título para sugerir que la psicología es campo de batalla; toma de partido en un combate que no podrá ... Psicología: Ideología y Ciencia by Néstor A. Braunstein Como bien lo describen los autores y autoras, psicología: ideología y ciencia es una lectura sintomática de la psicología académica postulada como una ciencia, ... Psicología: ideología y ciencia Este ensayo lo he fundamentado en el libro psicología: ideología y ciencia. Ya que esta obra contiene un gran número de reflexiones y estudios profundos que ... (DOC) PSICOLOGÍA IDEOLOGÍA Y CIENCIA | Ruth Lujano PSICOLOGÍA IDEOLOGÍA Y CIENCIA Braunstein argumenta que de ser la psicología una ciencia debe antes definir su objeto de estudio ya que este es la primer “ ...

PSICOLOGÍA: IDEOLOGÍA Y CIENCIA by MB Alfonso · 2019 — En 1975, la editorial Siglo XXI editó en México Psicología: ideología y ciencia, una publicación colectiva firmada por cuatro psiquiatras y psicoanalistas ... Braunstein, Néstor y Otros - Psicología, Ideología y Ciencia En su discurso oficial la psicología se arroga dos objetos: la conciencia y la conducta. ... Se trata, en otras palabras, de representaciones ideológicas (en el ... Where do you get an algebra 2 answer key for learning ... Apr 28, 2022 — The Algebra II answer key for Learning Odyssey is not available online. It appears you can obtain the answer key through the teachers ... Odyssey finals test Algebra 2 · All Things Algebra ; Algebra 1 - · Benchmark End of Year EOC Spiral Review Packet · iteachalgebra ; Algebra 2 College Algebra · or ... Part 1 [fbt] (Algebra II 2nd Semester Exam Review) - YouTube Algebra 2 Introduction, Basic Review, Factoring ... - YouTube Common Core Algebra II.Unit 1.Lesson 2.Solving ... - YouTube Common Core Algebra II.Unit 1.Lesson 5.Multiplying ... Common Core Algebra II.Unit 1.Lesson 3.Common ... - YouTube Algebra 2 Answers and Solutions 11th grade Algebra 2 answers, solutions, and theory for high school math, 10th to 11th grade. Like a math tutor, better than a math calculator or problem solver. The Odyssey - Book 1 Flashcards A quiz on Book 1 assigned by your teacher. (No, he didn't assign the quiz, it's the book. I'm making my own quiz.) In Too Deep Series by Lucia Jordan Book 1-4. In Too Deep: Office Adult Romance - Complete Series. by Lucia Jordan. 4.22 · 67 Ratings · 6 Reviews · ... In Too Deep: Complete Series by Lucia Jordan - Audiobook In Too Deep: Complete Series as it's meant to be heard, narrated by Tracy Landsmore. Discover the English Audiobook at Audible. Free trial available! In Too Deep: Office Adult Romance - Complete Series Jul 27, 2020 — In Too Deep: Office Adult Romance - Complete Series ... Lucia Jordan is a bestselling author who has penned hundreds of adult themed romantic ... In Too Deep: Office Adult Romance - Complete Series ... In Too Deep: Office Adult Romance - Complete Series. by Lucia Jordan. Narrated by Tracy Landsmore. Lucia Jordan. View More. Unabridged — 3 hours, 13 minutes. In Too Deep: Complete Series: Office Adult Romance ... Listening Length. 3 hours and 13 minutes ; Author. Lucia Jordan ; Narrator. Tracy Landsmore ; Audible release date. October 30, 2020 ; Language. English. In Too Deep by Lucia Jordan read by Tracy Landsmore Oct 30, 2020 — In Too Deep Office Adult Romance - Complete Series. Author: Lucia Jordan. Narrator: Tracy Landsmore. Unabridged: 3 hr 13 min. Format: Digital ... In Too Deep: Office Adult Romance - Complete Series Follow authors to get new release updates, plus improved recommendations. ... Lucia Jordan is a bestselling author who has penned hundreds of adult themed ... In Too Deep by Lucia Jordan - Audiobook In Too Deep. Office Adult Romance - Complete Series. By Lucia Jordan. Book cover for In Too Deep by Lucia Jordan. Play Sample. \$3.99. Buy Audiobook. Add to Cart. Lucia Jordan's Four Complete Series: (In Too Deep, ... Lucia Jordan is proud to release a new outstanding collection containing four of her Bestselling Series. Four “In Too Deeps”, No Waiting! Four “In Too Deeps”, No Waiting! In Too Deep by Mara Jacobs, Kathryn Shay, Tracey Alvarez, Lucia Jordan ... Links to my other reviews can be found ...