

1. Record Nr.	UNINA9910132194403321
Autore	Jarry Pierre
Titolo	Rf and microwave electromagnetism // Pierre Jarry, Jacques N. Beneat
Pubbl/distr/stampa	Hoboken, New Jersey : , : iSLE : , : Wiley, , 2014 ©2014
ISBN	1-118-98509-5 1-118-98510-9 1-118-98508-7
Descrizione fisica	1 online resource (224 p.)
Collana	Waves series
Disciplina	621.381/325
Soggetti	Electromagnetism - Mathematics Electromagnetic fields Microwaves Microwave communication systems
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	Cover; Title Page; Copyright; Contents; Preface; Introduction; Part 1. Transmission Lines; Chapter 1. Electromagnetic of TEM Transmission Lines; 1.1. General waves; 1.2. Transverse electromagnetic (TEM) waves; 1.3. Solutions of the transverse electromagnetic waves; 1.4. Characteristic parameters of the TEM lines; 1.4.1. Capacitance per unit of length; 1.4.2. Characteristic impedance; 1.4.3. Conductance per unit of length; 1.5. The power; 1.5.1. Density; 1.5.2. Flux; 1.6. Problems; 1.6.1. The band-line; 1.6.2. The coaxial cable; 1.7. Bibliography; Chapter 2. Losses In TEM Transmission Lines 2.1. Introduction 2.2. Perturbation computing; 2.3. Dielectric losses; 2.3.1. Determination from the dielectric constant; 2.3.2. Determination from the Maxwell-Ampere relation; 2.4. Metallic losses; 2.5. General case: dielectric losses and metallic losses; 2.6. Problems; 2.6.1. The transmission line with low losses; 2.6.2. Coaxial cable with losses; 2.7. Bibliography; Chapter 3. Determination of The Characteristics of TEM Lines; 3.1. Introduction; 3.2. Conform transformations; 3.2.1. Determination of the capacity; 3.2.2. Transformation in the complex

plane; 3.2.3. Orthogonality
 3.2.4. Position of Δ versus Δv 3.2.5. Recapitulation; 3.2.6. Example of computation; 3.3. Finite differences method; 3.3.1. Example of the finite differences method; 3.4. Problems; 3.4.1. Conform transformations; 3.4.2. Eccentric coaxial line using conform transformations; 3.5. Bibliography; Part 2. Guides; Chapter 4. Electromagnetic In Linear, Homogeneous, Isotropic And Lossless Guides; 4.1. Introduction; 4.2. Equations for a lossless medium; 4.3. Limiting conditions; 4.4. Progressive and evanescent waves; 4.5. Propagating waves; 4.6. Group speed; 4.7. Average power flux 4.7.1. Stokes' theorem 4.7.2. Ostrogradsky's theorem; 4.8. Power density; 4.9. Energy speed; 4.10. First example of TE waves; 4.11. Second example of TM waves; 4.12. Inverse waves; 4.13. Behavior of the TE and TM waves versus the position of frequency in connection with the cutoff; 4.13.1. Above the cutoff $\omega > \omega_c$; 4.13.2. At the cutoff $\omega = \omega_c$; 4.13.3. Under the cutoff $\omega < \omega_c$; 4.13.4. Summary; 4.14. Bibliography; Chapter 5. Losses In Guides; 5.1. Introduction; 5.2. TE waves; 5.3. TM waves; 5.4. Attenuation in the cases of TM and TE waves; 5.5. Problem 5.5.1. Waves between two parallel metallic and lossy planes 5.6. Bibliography; Chapter 6. Rectangular TM And TE Guides; 6.1. Introduction; 6.2. TM rectangular guide; 6.2.1. The fields; 6.2.2. The dispersive relation; 6.2.3. The power flux; 6.2.4. Attenuation; 6.2.5. Field lines; 6.3. TE rectangular guide; 6.3.1. The fields; 6.3.2. The dispersive relation; 6.3.3. The power flux; 6.3.4. Attenuation of the fundamental $m = 0$ and $n = 1$; 6.4. Problems; 6.4.1. The fundamental TE₀₁ mode of the rectangular guide; 6.4.2. Rectangular TE₀₁ guide with dielectric; 6.5. Bibliography
 Chapter 7. Circular TM And TE Guides

Sommario/riassunto

Microwave and RF elements play an important role in communication systems and due to the proliferation of radars, satellites, and mobile systems there is a need for the study of Electromagnetism. This book provides basic knowledge for the microwave and RF range. The book is intended for microwave engineers and for advanced graduate students (fourth and fifth year of university and engineers). Each of the ten chapters provides a complete analysis and modeling of the microwave structure used for emission or reception technology. We hope that this will provide to the students with a set

2. Record Nr.	UNINA9910716182203321
Titolo	Alfred F. Land. June 24, 1926. -- Committed to the Committee of the Whole House and ordered to be printed
Pubbl/distr/stampa	[Washington, D.C.] : , : [U.S. Government Printing Office], , 1926
Descrizione fisica	1 online resource (5 pages)
Collana	House report / 69th Congress, 1st session. House ; ; no. 1530 [United States congressional serial set] ; ; [serial no. 8537]
Altri autori (Persone)	UnderhillCharles Lee <1867-1946> (Republican (MA))
Soggetti	Claims Malicious mischief Vandalism Legislative amendments Traffic accidents Legislative materials.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Batch processed record: Metadata reviewed, not verified. Some fields updated by batch processes. FDLP item number not assigned.