1. Record Nr. UNINA9910790345703321

Titolo	LCP for microwave packages and modules / / [edited by] Anh-Vu H. Pham, Morgan J. Chen, Kunia Aihara [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2012
ISBN	1-107-22699-6 1-139-41127-6 1-280-77372-3 9786613684493 1-139-42263-4 0-511-77724-8 1-139-41961-7 1-139-41756-8 1-139-42166-2 1-139-42370-3
Descrizione fisica	1 online resource (xiv, 253 pages) : digital, PDF file(s)
Collana	The Cambridge RF and microwave engineering series
Classificazione	TEC024000
Disciplina	621.381/3
Soggetti	Microwave devices - Materials Flexible electronics Microelectronic packaging - Materials Liquid crystal devices Polymer liquid crystals
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Machine generated contents note: 1. Introduction; 2. Characteristics of liquid crystal polymer (LCP) Morgan J. Chen, Kunia Aihara, Cheng Chen and Anh-Vu H. Pham; 3. Fabrication techniques for processing LCP laminates; 4. LCP for wafer level chip scale MEMS; 5. LCP for surface mount interconnects, packages, and modules; 6. LCP for passive components Hai Ta, Morgan J. Chen, Kunia Aihara, Andy C. Chen, Jia-Chi Samual Chieh and Anh-Vu H. Pham; 7. LCP for system design Morgan J. Chen, Kunia Aihara, Andy C. Chen, Jia-Chi Samual Chieh and Anh-Vu H. Pham; 8. LCP reliability.

Sommario/riassunto

A comprehensive overview of electrical design using Liquid Crystal Polymer (LCP), giving you everything you need to know to get up-to-speed on the subject. This text describes successful design and development techniques for high-performance microwave and millimeter-wave packages and modules in an organic platform. These were specifically developed to make the most of LCP's inert, hermetic, low-cost, high-frequency (DC to 110+ GHz) properties. First-hand accounts show you how to avoid various pitfalls during design and development. You'll get extensive electrical design details in areas of broadband circuit design for low-loss interconnects, couplers, splitters/combiners, baluns, phase shifters, time-delay units (TDU), power amplifier (PA) modules, receiver modules, phased-array antennas, flexible electronics, surface mounted packages, Microelectromechanical Systems (MEMS) and reliability. Ideal for engineers in the fields of RF, microwave, signal integrity, advanced packaging, material science, optical and biomedical engineering.