1. Record Nr. UNINA9911004800603321 Autore Licari James J. <1930-> **Titolo** Adhesives technology for electronic applications: materials, processes, reliability / / by James J. Licari and Dale W. Swanson Norwich, NY,: William Andrew Pub., c2005 Pubbl/distr/stampa **ISBN** 1-282-01328-9 9786612013287 0-8155-1600-2 Descrizione fisica 1 online resource (477 p.) Collana Materials and processes for electronic applications series Altri autori (Persone) SwansonDale W Disciplina 621.381 Soggetti **Electronics - Materials** Adhesives Electronic packaging 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 and index. Nota di contenuto Front Cover; Adhesives Technology for Electronic Applications: Materials, Processes, Reliability; Copyright Page; Table of Contents; Chapter 1. Introduction; 1.1 ADHESIVE TYPES AND DEFINITIONS; 1.2 SUMMARY OF PACKAGING TECHNOLOGIES; 1.3 HISTORY OF ADHESIVES IN ELECTRONIC APPLICATIONS; 1.4 COMPARISON OF POLYMER ADHESIVES WITH METALLURGICAL AND VITREOUS ATTACHMENT MATERIALS: 1.5 SPECIFICATIONS: 1.6 THE MARKET: REFERENCES: Chapter 2. Functions and Theory of Adhesives; 2.1 MECHANICAL ATTACHMENT; 2.2 ELECTRICAL CONNECTIONS; 2.3 THERMAL DISSIPATION: 2.4 STRESS DISSIPATION: REFERENCES Chapter 3. Chemistry, Formulation, and Properties of Adhesives 3.1

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## Sommario/riassunto

This book is unique in its comprehensive coverage of all aspects of adhesive technology for microelectronic devices and packaging, from theory to bonding to test procedures. In addition to general applications, such as dies, substrate, and lid and chip stack attachments, the book includes new developments in anisotropic, electrically conductive, and underfill adhesives. Rapid curing methods such as UV, microwave, and moisture (which comply with current environmental and energy requirements) are covered. Over 80 tables and 120 figures provide a wealth of data on properties, performance, and rel