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Nota di contenuto	Front Cover; Dedication; Adhesives Technology for Electronic Applications: Materials, Processing, Reliability; Copyright; Contents; Preface; Acknowledgments; Disclaimer; Chapter 1 -Introduction; 1.1 - Adhesive types and classifications; 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 -Market and market trends; References; Chapter 2 -Functions and theory of adhesives; 2.1 -Mechanical attachment; 2.2 -Electrical connections 2.3 -Thermal dissipation2.4 -Stress dissipation; References; Chapter 3 -Chemistry, Formulation, and Properties of Adhesives; 3.1 -Chemistry; 3.2 -Formulation additives; 3.3 -Formulation processes; 3.4 - Properties; References; Chapter 4 -Adhesive Bonding Processes; 4.1 - Cleaning; 4.2 -Surface treatments; 4.3 -Adhesive dispensing; 4.4 - Placement of devices and components; 4.5 -Curing; 4.6 -Rework; References; Chapter 5 -Applications; 5.1 -General applications; 5.2 - Specific applications; References; Chapter 6 -Reliability; 6.1 -Physics of failure methodology; 6.2 -Failure modes and mechanisms 6.3 -Reliability prediction and modeling6.4 -Qualification, quality

control, and specifications; References; Chapter 7 -Test and Inspection Methods; 7.1 -Physical tests; 7.2 -Electrical tests; 7.3 -Environmental tests; 7.4 -Thermal tests; 7.5 -Mechanical and thermomechanical tests; 7.6 -Chemical analysis; References; Appendix; Conversion factors; Abbreviations, Acronyms, and Symbols; Index

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## Sommario/riassunto

Adhesives are widely used in the manufacture and assembly of electronic circuits and products. Generally, electronics design engineers and manufacturing engineers are not well versed in adhesives, while adhesion chemists have a limited knowledge of electronics. This book bridges these knowledge gaps and is useful to both groups. The book includes chapters covering types of adhesive, the chemistry on which they are based, and their properties, applications, processes, specifications, and reliability. Coverage of toxicity, environmental impacts and the regulatory framework make this b

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