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CONFORMAL COATINGS FOR PRINTED WIRING ASSEMBLIES (PWA)
4.2 COATINGS FOR SEMICONDUCTOR SINGLE CHIP AND MULTICHIP MODULES4.3 COATINGS FOR DISCRETE PASSIVE DEVICES; 4.4 MULTILAYER CIRCUIT BOARD FABRICATION; 4.5 INTERLAYER DIELECTRIC COATINGS FOR MULTICHIP MODULE SUBSTRATES; 4.6 POLYMER WAVEGUIDES; 4.7 SOLDER MASKANTS; 4.8 CHIP-SCALE AND BALL GRID ARRAY PACKAGES; 4.9 CHIP-ON-BOARD (COB) AND GLOB-TOP COATINGS; 4.10 PARTICLE IMMOBILIZING COATINGS AND PARTICLE GETTERS; 4.11 REINFORCEMENT OF INTERCONNECTIONS; 4.12 WIRE AND COIL COATINGS; 4.13 COATINGS FOR SPACE APPLICATIONS; 4.14 COATINGS FOR AUTOMOTIVE APPLICATIONS
4.15 COATINGS FOR ELECTROMAGNETIC INTERFERENCE (EMI) SHIELDING AND ELECTROSTATIC DISCHARGE (ESD)4.16 COATINGS FOR MEDICAL APPLICATIONS; 4.17 TAMPER-PROOF COATINGS; 4.18 TEMPORARY COATINGS; 4.19 POLYMER THICK FILMS; REFERENCES; Chapter 5. Reliability Assurance and Testing; 5.1 INITIAL QUALIFICATION; 5.2 RECEIVING INSPECTION; 5.3 IN-PROCESS INSPECTION AND TESTING; 5.4 FINAL INSPECTION AND TEST; 5.5 RELIABILITY PREDICTION; 5.6 FAILURE MODES AND MECHANISMS; 5.7 TEST PROCEDURES FOR CONTAMINANTS AND CLEANLINESS ASSURANCE; 5.8 ACCELERATED STRESS AND ENVIRONMENTAL TESTS 5.9 TESTS FOR COATING INTEGRITY5.10 ADHESION; REFERENCES; Chapter 6. Test Methods; 6.1 PHYSICAL/MECHANICAL TEST METHODS; 6.2 ELECTRICAL TESTS; 6.3 ENVIRONMENTAL EXPOSURE TESTS; 6.4 THERMAL TESTS; 6.5 CHEMICAL/ANALYTICAL TESTS; REFERENCES; Chapter 7. Specifications and Documents; 7.1 TOP-LEVEL PERFORMANCE OR REQUIREMENTS SPECIFICATION; 7.2 MATERIAL SPECIFICATIONS; 7.3 PROCESS SPECIFICATIONS; 7.4 WORK INSTRUCTIONS; 7.5 FAILURE ANALYSIS DOCUMENTATION; 7.6 MILITARY, SPACE, GOVERNMENT. AND INDUSTRY SPECIFICATIONS; 7.7 SPECIFICATIONS RELATING TO ORGANIC COATINGS; Appendix; Index

Sommario/riassunto

This first book in the Materials and Processes for Electronics Applications series answers questions vital to the successful design and manufacturing of electronic components, modules, and systems such as: - How can one protect electronic assemblies from prolonged high humidity, high temperatures, salt spray or other terrestrial and space environments? - What coating types can be used to protect microelectronics in military, space, automotive, or medical environments? - How can the chemistry of polymers be correlated to desirable physical and electrical properties? - How can a