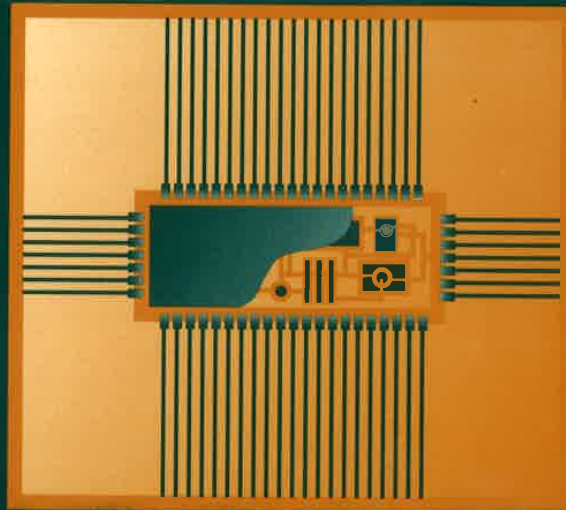


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# PLASTIC- ENCAPSULATED MICROELECTRONICS

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Materials,  
Processes,  
Quality,  
Reliability, and  
Applications

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Edited by

Michael G. Pecht  
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**LIFE TEST:** Test of a component or circuit under electrical load and high temperature to assure reliability device.

**LOOP:** The curve or arc of the wire between the attachment points at each end of a wirebond.

**LOOP HEIGHT:** A measure of the deviation of the wire loop from the straight line between the attachment points of a wirebond. Usually, it is the maximum perpendicular distance from this line to the top of the wire loop.

**MARKING:** A method of identifying printed boards or components with part number, revision letter, manufacturer code, and so on.

**METALLIZATION:** A deposited or plated thin metallic film used for its protective or electrical properties. The process of applying a conductive metal film to the surface of the integrated circuit chip. This metallization is used both for interconnection on the chip and to define a place for the attachment of bond wires.

**MICROCRACKS:** A thin crack in a substrate or chip, or in thick-film trim-kerf walls, that can only be seen under magnification and which can contribute to latent failure phenomena.

**MICROSECTIONING:** The preparation of a specimen for the metallographic examination of the material (usually by cutting out a cross section, followed by polishing, etching, staining, and mounting).

**MIL:** An unit of length that is equal to 0.001 in or 0.0254 mm.

**MISREGISTRATION:** Improper alignment of successively produced features or patterns.

**MODULE:** A generic term referring to assembled units in electronic equipments/assemblies.

**MODULUS OF ELASTICITY:** The ratio of stress to strain in a material that is elastically deformed.

**MOISTURE BARRIER BAG (MBB):** A plastic bag designed to restrict the transmission of water vapor and used to pack moisture-sensitive plastic-encapsulated components.

**MOISTURE STABILITY:** The functional stability of a circuit under high-humidity conditions.

**MOLDING COMPOUND:** The plastic formulation used to package ICs through a molding process.

**MONOMER:** A precursor of low molecular weight used as a starting material for polymerization to produce molecules of larger molecular weight, called polymers.

**MULTICHIP PACKAGE:** An electronic package that carries a number of chips and

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