

About Reliability Modelling of Electronic Components and Systems

Marius BAZU

National Institute for R & D in Microtechnology – IMT, Bucharest, Romania

Titu BAJENESCU

La Conversion, Switzerland

Abstract

The general principles of reliability modelling for electronic components and systems are presented. The 'Physics of Failure' approach is discussed versus the 'Statistical' approach, the advantages and disadvantages of each approach being underlined. For electronic components, the 'physical' and 'empirical' models are compared, the role of failure analysis being emphasized in each case.

Keywords: *Reliability, failure analysis, failure mechanisms, physics of failure, reliability modelling, electronic components, electronic systems.*