

Statistical Analysis for Reliability Growth Data in the Arrhenius Stress Model

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KEY WORDS: Reliability growth; Monotone model; Arrhenius stress model; Confidence lower bound of the reliability

Abstract: In this paper, we adopt the Arrhenius stress model as accelerated life equation. We propose a method to analyze reliability growth data taken from different stress environments. The parameters in the model are estimated by the maximum likelihood method. Then, the confidence lower bound of the reliability can be obtained. The simulation studies show that the method is feasible and the accuracy can meet the engineering requirements.

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