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| | 영문 | Bayesian Estimation for the Reliability of a Multicomponent Stress-Strength System Using Noninformative Priors |
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논문 초록

Consider the problem of estimating the reliability of a multicomponent stress-strength system which functions if at least r of the k identical components simultaneously function. All stresses and strengths are assumed to be independent random variables with two parameter Weibull distributions. First, we derive reference priors and probability matching priors which are noninformative priors. We next investigate sufficient conditions for propriety of posteriors under reference priors and probability matching priors. Finally, we provide, using these priors, some numerical results for Bayes estimates of the reliability by applying Gibbs sampling technique.