## MIL-HDBK-217F

## APPENDIX C: BIBLIOGRAPHY

- 26. "VHSIC Impact on System Reliability," RADC-TR-88-13, AD B122629.
- 27. "Reliability Assessment of Surface Mount Technology," RADC-TR-88-72, AD A193759.
- 28. "Reliability Prediction Models for Discrete Semiconductor Devices," RADC-TR-88-97, AD A200529.

This study developed new failure rate prediction models for GaAs Power FETS, Transient Suppressor Diodes, Infrared LEDs, Diode Array Displays and Current Regulator Diodes.

- 29. "Impact of Fiber Optics on System Reliability and Maintainability," RADC-TR-88-124, AD A201946.
- 30. "VHSIC/VHSIC Like Reliability Prediction Modeling," RADC-TR-89-171, AD A214601.

This study provides the basis for the VHSIC model appearing in MIL-HDBK-217F, Section 5.

31. "Reliability Assessment Using Finite Element Techniques," RADC-TR-89-281, AD A216907.

This study addresses surface mounted solder interconnections and microwire board's plated-thru-hole (PTH) connections. The report gives a detailed account of the factors to be considered when performing an FEA and the procedure used to transfer the results to a reliability figure-of-merit.

32. "Reliability Analysis/Assessment of Advanced Technologies," RADC-TR-90-72, ADA 223647.

This study provides the basis for the revised microcircuit models (except VHSIC and Bubble Memories) appearing in MIL-HDBK-217F, Section 5.

- "Improved Reliability Prediction Model for Field-Access Magnetic Bubble Devices," AFWAL-TR-81-1052.
- 34. "Reliability/Design Thermal Applications," MIL-HDBK-251.
- 35. "NASA Parts Application Handbook," MIL-HDBK-978-B (NASA). This handbook is a five volume series which discusses a full range of electrical, electronic and electromechanical component parts. It provides extensive detailed technical information for each component part such as: definitions, construction details, operating characteristics, derating, failure mechanisms, screening techniques, standard parts, environmental considerations, and circuit application.
- 36. "Nonelectronic Parts Reliability Data 1991," NPRD-91.

  This report contains field failure rate data on a variety of electrical, mechanical, electromechanical and microwave parts and assemblies (1400 different part types). It is available from the Reliability Analysis Center, PO Box 4700, Rome, NY 13440-8200, Phone: (315) 337-0900.

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