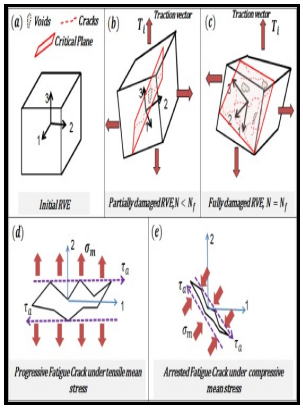
Inelastic strain analysis of solder joint in NASA fatigue specimen - final report

University of Maryland - Inelastic Strain Analysis of Solder Joint in NASA Fatigue Specimen



Description: -
-
Jesuits -- Controversial literature.
Jesuits -- Middle East.
Viscoplasticity.
Thermal cycling tests.
Solders.
Plastic properties.
Finite element method.
Fatigue life.
Fatigue (Materials)
Elastic properties.
Creep analysis.
Solder and soldering.
Strains and stresses.Inelastic strain analysis of solder joint in NASA fatigue specimen - final report
-
NASA contractor report -- NASA CR-187864.
NASA-CR -- 187864.Inelastic strain analysis of solder joint in NASA fatigue specimen - final report
Notes: Microfiche. [Washington, D.C.] : National Aeronautics and Space Administration, [1991]. 1 microfiche.
This edition was published in 1991

Tags: #Reliability #assessment #of #indium #solder #for #low #temperature #electronic #packaging

Inelastic Strain Analysis of Solder Joint in NASA Fatigue Specimen

However, the Miner's rule assumes that the material is free of damage interaction. Thus, for one-dimensional structure, damage variable can be defined as: As stated by Makkonen, total fatigue life of a component can be divided into three phases: crack initiation, stable crack growth, and unstable crack growth.

Dr Nazri Kamsah

Electronic assemblies in actual service are often exposed to cyclic temperature changes.

A State

. However, lead was discovered to be one of the top 17 chemicals that posed great threat to human life and environment by Environment Protection Agency EPA. Once the Δ W is determined for a given condition, the numbers of cycles to failure can be calculated based on the proposed equation.

The influence of prior strain rate on stress relaxation in solder alloys

Δ T e is the equivalent cycling temperature swing.

A new experimental method to evaluate creep fatigue life of flip

In this article, the majority fatigue life models are summarized, with emphasis on the latest developments in the fatigue life prediction methods. The two variables are collected from the center of solder joints based on the single solder joint finite element models to account for the differences in geometry and thermal loading.

Related Books

- Alaskan North Slope geology. by Irv Tailleur and Paul Weimer
- Patagonian fishery resources and the offshore fisheries in the south-west Atlantic
- Reflections occasioned by the perusal of a pamphlet entitled A vindication of the opinions delivered
- Birthings and blessings - liberating worship services for the inclusive church
- GegenSpieler - Gerhard Löwenthal, Karl-Eduard von Schnitzler