

## **The behavior of flexible interconnected lead under dynamic tensile conditions**

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### **Abstract**

Extensibility is very important for flexible electronic devices which depends on the structural of interconnected lead. It is necessary to study the structural response of flexible interconnected lead during dynamic stretching as skin electronic devices work in a dynamic environment rather than a static environment. In this work, the model of interconnected lead was established via finite element software, and the structure deformation forms of the lead under different tensile velocities were calculated by numerical simulation, and the stress and strain states of each part of the deformed lead were compared. The result reveals that the deformation forms vary from different tensile velocities, and the corresponding stress vulnerabilities are also different. The optimal design of interconnected lead for different service conditions can improve the measurement stability of flexible electronic devices with service life extension.

### **References**

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