# A STUDY OF BENDING DEFORMATION OF ELECTRONIC PACKAGING MULTILAYER SUBSTRATE SUBJECTED TO UNIFORM THERMAL LOADING

E-mail: 9126610@ mail.dyu.edu.tw

ABSTRACT

RECENTLY, BENDING DEFORMATION ANALYSIS OF MULTI-LAYERED STACKS DURING DIE BONDING PROCE -SS OF ELECTRONIC PACKAGING HAS RECEIVED CONSIDERABLE RENEWED INTEREST. INTERFACIAL SHEAR STRESS,PEELING STRESS DUE TO THERMAL AND ELASTIC MISMATCH IN LAYERED ELECTRONIC ASSEMBLIE -S ARE ONE THE MAJOR CAUSES OF THE MECHANICAL FAILURE OF ELECTRONIC PACKAGES.IN THIS RESE -ARCH,A COMPARATIVE ANALYSIS OF A SERIES MULTILAYER STRUCTURES THEORY WILL BE STUDIED.COM -PARE CLOSED-FORM SOLUTION WITH FINITE ELEMENT ANALYSIS,ADOPT THE MOST ACCURATE THEORY TO BUILD UP A COMPLETE THERMAL STRESS ANALYTICAL SYSTEM IN ELECTRONIC PACKAGING.WITH THIS RE -SEARCH,THE DESIGNER CAN ACCURATELY EVALUATE THE THERMO-MECHANICAL INTEGRITY OF VARIOUS E -LECTRONIC DEVICES.

Keywords: THERMAL STRESS, BENDING DEFORMATION, DIE BONDING

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