Fabrication of Arrayed Glass Micro-lenses by Vacuum Forming Process Kali Ayyala, H. H. Chien, 馬廣仁, S. F. Wang, C. L. Chao Mechanical Engineering Engineering

k jma@chu. edu. tw

Abstract

Micro-lens arrays are having numerous applications in the field of opto-electronics. There are

several approaches to fabricate arrayed glass microlens such as lithographic, non-lithographic, sol-gel,

ultra-precision machining and molding process. The processes like lithographic and diamond point

turning methods produce very expensive microlens array which is not suitable for mass production.

The focus of this study is on the formation of arrayed glass microlens by vacuum forming process

which is considered to have a great potential for the mass production with high precision, low cost and ease of manufacture.

Keyword: Micro-lens Array

WC

Vacuum Forming